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Canada and the Nuclear Arms Race: A Case Study in Unilateral Self-Restraint.

Submitted by Joseph M. Sisto, Department of Political Science, McGill University, Montreal.
August, 1997.

A thesis submitted to the Faculty of Graduate Studies and Research
in partial fulfilment of the requirements of the degree of Master of Arts in political science.

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Abstract

The objective of this thesis is to determine why Canada, a state that pioneered nuclear technology, and that faced, throughout the Cold War, the Soviet threat to its national security, consistently rejected any opportunity to convert its latent nuclear capability into an indigenous nuclear weapons program. The answer to this research question must address a number of explicit contradictions in Canadian foreign policy. While Canada has, on the one hand, rejected the bomb, it has, on the other hand, pursued defence and industrial policies based upon intimate involvement with nuclear weapons. Moreover, Canada espouses, on the one hand, a clearly realpolitik view of international relations, while, on the other hand, committing to forging for itself a role as an international peace broker. It becomes, therefore, unclear which theory of international relations could adequately explain this dualism in Canadian policy formulation. This thesis argues that power and self-interest are not separable from Canada's decision to reject the bomb, and that by modifying certain precepts of realist theory, we may substantiate the hypotheses that two disincentives to proliferation are at the root of Canada's policies: first, Canada's political and geographical proximity to the United States and thus a credible U.S. nuclear umbrella; and second, prestige, where Canada interpreted both the rejection of its nuclear option and its internationalist policies as a sign of independence vis-a-vis the United States.

Résumé

L'objectif de cette thèse est d'établir les raisons pour lesquelles le Canada, un état pionnier dans le domaine de la technologie nucléaire qui a, de plus, fait face pendant la "Guerre froide" à la menace Soviétique, a toujours et invariablement rejeté son option de développer ses propres armes nucléaires. La réponse à cette question exige un examen de la politique étrangère Canadienne explicitement contradictoire: malgré que le Canada rejette la bombe, l'état poursuit des politiques de défense nationale ainsi qu'industrielles qui se relient intimement à la technologie nucléaire. De plus, malgré que l'inteprétation Canadienne des relations internationales en est une de "realpolitik", le Canada se dévoue à un role d'agent de paix internationale. Il est donc incertain quelle théorie de relations internationales servirait le mieux à expliquer ce phénomène. Nous sommes d'avis, qu'en modifiant certaines propositions de la théorie "réaliste", nous pourrions soutenir deux hypothèses capables d'expliquer le rejet de la bombe canadienne et de son role dit "internationaliste": premièrement, la proximité politique et géographique du Canada aux États-Unis, de sorte que la défense nucléaire américaine s'est étendue au-dessus du Canada, et deuxièmement, l'espoir canadien d'accroître son prestige et de mettre en valeur son indépendence politique vis-à-vis les États-Unis.

I- Introduction

Unilateral Self-Restraint: Conceptual and Theoretical Issues

Horizontal nuclear proliferation, by definition, refers to the spread of independent ownership of nuclear weapons to nations other than the original five members of the proverbial "nuclear club".[1] It follows, therefore, that most of the literature on the subject tends to focus on those would-be proliferators which have either the existing or potential capacities to develop a sustainable weapons program, as well as those which are known or believed to have already developed such a program clandestinely.[2]

The analysis of state choices, "the why and the wherefore"[3] of nuclear proliferation, traditionally proceeds as a function of the incentives versus disincentives which characterize the context in which proliferation decisions are made. Furthermore, it is typical of the literature in this

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[1] The original five members are the United States (which exploded its first bomb over Hiroshima, Japan, in 1945), the former U.S.S.R. (which detonated its first atomic bomb in 1949 and the world's first hydrogen bomb in 1953), Great Britain (which exploded its atom bomb in 1952 and its first hydrogen bomb in 1957), France (which performed a nuclear weapon test in 1960 and exploded a hydrogen bomb in 1968) and China (which exploded its first atomic bomb in 1964 and its first hydrogen bomb in 1967).

[2] Countries other than those in the nuclear club which have the capacity to develop a nuclear weapons program are commonly termed "threshold" nations. There are at least 20 such threshold nations of which a number have expressly renounced their 'nuclear option' including the former West Germany (and today Germany), Italy, Japan, Sweden, Switzerland, Australia, New Zealand, Egypt, and, of course, Canada. These countries have, however, developed nuclear programs for civilian/industrial purposes. Of a large number of other threshold countries at least three (3) have developed a nuclear energy program and possess a nuclear arsenal, albeit a relatively unsophisticated one in both qualitative and quantitative terms; these are India, Pakistan, and Israel. See Ted Greenwood, *et al.* Nuclear Proliferation: Motivations, Capabilities and Strategies for Control. New York: McGraw-Hill, 1977; Walter B. Wantz, Nuclear Proliferation. Washington D.C.: Public Affairs Press, 1968; Mitchell Reiss, Without the Bomb: The Politics of Nuclear Nonproliferation. New York: Columbia University Press, 1988. Also see Avner Cohen and Benjamin Frankel, "Opaque Nuclear Proliferation", Journal of Strategic Studies Vol. 13, No. 3, 1990, pp. 14-44.

[3] Phrase borrowed from Jozef Goldblat (Ed.) Non-Proliferation: The Why and the Wherefore. London: Taylor and Francis, 1985.

field of scholarship to espouse the argument that "the incentives to go nuclear appear to outweigh the disincentives."[4] At the theoretical level, this assertion finds considerable support from the 'realist' paradigm which has hitherto largely dominated international relations discourse.

The attempt to develop "comprehensive and systematic" theoretical paradigms to examine international relations was prompted largely as a reaction to the unprecedented devastation of World War I (1914-1918).[5] Two competing outlooks figured most prominently: first, the notion of "collective security" as propounded by then U.S. President Woodrow Wilson, which dominated the study of international relations only briefly between 1918 and 1939, that is, from the close of World War I to the start of World War II. Wilson's approach, which proceeded under a number of more or less apt labels such as 'idealism', 'globalism', 'liberalism', and 'institutionalism', posited that the creation of a world system of collective security based on the establishment of international institutions and on the reduction of the military capacities of individual nation-states in favour of a reliance on the military capability of the world community as a whole would ensure peace and security.[6] Second, as a reaction to the apparent utopian elements of globalist theory, the rise of facism in Europe, and the outbreak of World War II and concurrent failure of the League of Nations, realism emerged as the new and dominant approach to international relations. Realism held that all international institutions

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[4] William Epstein, "Why States Go -- and Don't Go -- Nuclear," Annals 430 (March 1977), p. 16. Also see Kenneth Waltz, "The Spread of Nuclear Weapons: More may be Better", Adelphi Papers No.171, London: International Institute for Strategic Studies, 1981.

[5] Ray Maghroori, "Introduction: Major Debates in International Relations", in R. Maghroori and B. Ramberg, Globalism Versus Realism: International Relations' Third Debate. Boulder: Westview Press, 1982, p. 9.

[6] *Ibid.*, p. 10. Also see the classic work by E.H. Carr, The Twenty Years' Crisis, 1919-1939. London: MacMillan, 1939, for an exhaustive discussion on this topic.

and processes generally were founded upon the threat of force.[7] Realism certainly does not reject the desirability of an institutionalized world, it merely argues that such is an ideal which must essentially "wait its turn", for the world community is not yet prepared to behave in the altruistic fashion that collective security necessitates. Nation-states will not choose to compromise their own interests in an anarchical world -- a state must ensure its own security to compensate for the aggressive nature of other states.[8] Thus, state choices proceed as a function of motivated self-interest.

Both globalism and realism forward important propositions concerning state choices in general, and provide a theoretical basis upon which one may construct an understanding of the 'why and the wherefore' of nuclear proliferation. In other words, both theories consider how and why states behave the way they do and may thus permit us to determine the reasons why states choose to arm themselves with, not to arm themselves, or, to disarm themselves of, nuclear weapons.

While it is not difficult to view the arms race in a realpolitik sense, the renunciation of nuclear weapons by states which, according to traditional realism, *should* have acquired them, may, *prima facie*, suggest a deficiency in the theory as such. The contention here, however, is that even in analyzing the behaviour of those states which choose to renounce nuclear weapons, realism may continue to hold its ground as a theoretical approach to the study of nuclear non-proliferation.[9]

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[7] *Ibid.*, E.H. Carr.

[8] Hans Morgenthau, Politics Among Nations: the Struggle for Power and Peace, (5th Ed.) New York: Knopf, 1972, pp.4, 547-548.

[9] On this same issue see T.V. Paul, "Realism, Institutionalism and Nuclear Choices," Paper Presented at the A.P.S.A. Convention, Chicago, Illinois, September 1992. Admittedly, according to Paul, "broader theoretical level explanations are lacking in this realm," p. 1. While also admitting to the continued validity of realism, Paul suggests that neo-liberal institutionalism, a contemporary offshoot of globalist theory, as a theoretical alternative, may equally serve to advance our understanding. Though this thesis paper suggests that Canada's "internationalism" may not necessarily fall under the rubric of neo-liberal institutionalism as is commonly thought, this author concurs with Paul that the existence of an international

The objective of this thesis is to determine the conditions under which states may decide against nuclear weapons acquisition. More specifically, this thesis attempts to provide an answer to the question why did Canada, a state that pioneered nuclear technology, and that faced a serious threat (Soviet) to its national security, consistently reject any opportunity to convert its latent capability into an indigenous nuclear weapons program?

The answer to this research question must address an explicit contradiction in Canadian nuclear policy. While Canada has, on the one hand, rejected acquisition or the development of its own arsenal as an option, and been "at the forefront of international efforts to control the spread of nuclear weapons"[10], it has consistently, on the other hand, pursued defense and industrial policies based upon intimate involvement with nuclear weapons:

> 1. Canada has played a vital role in the manufacture of U.S. weapons systems (carried out especially under the aegis of the Canada-U.S. Defense Production Sharing Arrangements)[11];
>
> 2. Canada has made its territory and facilities available to its

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proliferation regime as a constraint cannot be overlooked, nor underestimated, although, in the case of Canada, its effects came into force much later and cannot, therefore, fully explain Canada's choice to forego developing its own weapons.

[10] Marie-France Desjardins & Tariq Rauf, "Opening Pandora's Box? Nuclear-Powered Submarines and the Spread of Nuclear Weapons", Aurora Papers 8 Ottawa: Canadian Centre for Arms Control and Disarmament (February 1988) p. 30.

[11] These arrangements allowed Canadian industries to bid on U.S. defense contracts on an equal footing with their U.S. counterparts. Lower costs and better quality materials favoured Canadian industry, while the U.S., "concerned about the vulnerability of American industries to nuclear attack," was satisfied with the knowledge that defense industries, by virtue of these arrangements, were sufficiently dispersed across the North American continent to ensure a "greater chance" of maintaining weapons production in the event of war with the Soviet Union. Refer to K. J. Holsti and T.A. Levy, "Bilateral Institutions and Transgovernmental Relations Between Canada and the United States," in A.B. Fox, A.O. Hero, & J.S. Nye (Eds.) Canada and the United States: Transnational and Transgovernmental Relations. New York: Columbia University Press, 1976, pp. 290-291.

allies for the training of military personnel and testing of nuclear weapons delivery vehicles[12];

3. Canada has been one of the world's largest suppliers of Uranium and nuclear reactors overseas[13] ;

4. As the U.S.'s only partner in the North American Air Defense Command (NORAD), as well as its membership with the North Atlantic Treaty Organization (NATO), Canada had essentially identified itself as an "enemy" of the Soviet Union, with immediate access to tactical weapons and decision-making authority in the early-warning defense system;

5. Canada currently allows U.S. Cruise Missile testing on and over its territory as well as nuclear submarine exercises in Canadian waters.

This thesis, therefore, seeks to clarify an apparent contradiction inherent in horizontal nuclear proliferation; namely, why some states may decide against an indigenous nuclear weapons program even when they possess an exploitable latent capability, and may reasonably justify such development as a national security requirement, by examining the case of Canada. In addition, it will explore why such a state does not completely relinquish nuclear weapons by relying on an ally's "nuclear umbrella" for its security, and thus the continued relevance of realist theory.

It will be argued that the case of Canada does not fit easily into any extant theoretical

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[12] Cooperative military training, planning, and coordination began with the Permanent Joint Board on Defense, 1940, discussed below. There are currently more than half a dozen cooperative military institutions between the U.S. and Canada including NATO, NORAD, and the United States-Canada Civil Emergency Planning Committee.

[13] In 1975, Canada, along with the world's six other major suppliers of uranium ore and nuclear materials (France, West Germany, Japan, the U.S.S.R., and U.S.A.), participated in the establishment of the London Suppliers Group, a multilateral body meeting in London to coordinate a policy aimed at regulating international commerce of fissionable materials and various nuclear equipment. The group's membership would be expanded the following year. See Office of Technology Assessment, Nuclear Proliferation and Safeguards. New York: Praeger, 1977, pp. 220-223.

framework (or that it only partially supports existing theories) and that the best solution to this problem is to devise a modified form of realist theory to explain Canada's behaviour within the framework of a single theoretical approach. An important goal of this thesis is to specify and elaborate historical processes which have impacted upon Canadian nuclear policy, in order to comment on the relevance of its theoretical interpretation. By thoroughly examining the dynamics of the Canadian political scene as it related to the nuclear question, we may begin to explain the mixture of orientations in Canadian nuclear policy and the determinants involved in the decision-making process, and thus substantiate our modified theoretical approach and the hypotheses formulated therefrom to explain why Canada rejected the bomb.

It is hypothesized that Canada's decision to remain weapons-free was determined by two main factors: first, prestige, where the Canadian Government interpreted rejection of the nuclear option as a sign of sovereignty and independence; and, second, by Canada's political and geographical proximity to the United States and thus by a credible U.S. nuclear umbrella.

II- Theoretical Problematic

Fitting Canadian Nuclear Policy into Realist Theory

The political theory of realism was first expounded in scholarship by the ancient Greek historian Thucydides (circa 460-400 B.C.) in his History of the Peloponnesian War.[14] In his work Thucydides explains that the Greek world of the mid-fifth century B.C. saw the city-state of Athens transform the Confederacy of which it was a member into an empire under its leadership. Meanwhile,

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[14] See Thucydides, History of the Peloponnesian War. Ithaca: Cornell University Press, 1969. Thucydides is arguably the most profound influence in the chronicling of ancient Greek history in general. However, in this particular work, Thucydides confronts the question what *caused* the war between Sparta and Athens -- the most important conflict in Ancient Greek history -- and in proposing his answer effectively set the foundation upon which would be constructed the study of international relations.

the Spartan leadership of the Peloponnesus observed this unprecedented growth of their political rivals with tremendous apprehension. Thucydides, prior to the war, had warned Athens "...[t]hat the Spartans, fearing the growth of (your) power, are eager for war."[15] The cause of the war, according to Thucydides, lay beyond the obvious quest for territorial supremacy and political dominance. Thucydides offered no complex medley of geopolitical or economic hypotheses, rather, he concludes that a far more trivial explanation existed:

> ...[s]o that in time to come no one may be at a loss to know...the true though unavowed cause (I) believe to have been the growth of Athenian power, which terrified the Spartans and forced them into war...[16]

The Spartans feared that Athens would eventually direct its efforts and attention toward the Peloponnesus, and the notion that "today's friend may become tomorrow's foe" took on added urgency. Thus, it was "fear associated with a shift in the balance of power" which led Sparta to take "countermeasures to build up its military strength and enlist the support of its allies. Athens responded in kind."[17] The significance of Thucydides' conclusion lay in that his insights are often as relevant today as they were millenia ago, and the names of Canada and the Soviet Union could easily be substituted for Sparta and Athens.[18]

> In all such historical examples, a good case can be made that fear is a dominant characteristic and motivating factor for arms

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[15] Simon Hornblower, A Commentary on Thucydides. Oxford: Clarendon Press, 1991, p.78.

[16] *Ibid.*, p. 64.

[17] P.R. Viotti & Mark V. Kauppi, International Relations Theory: Realism, Pluralism,Globalism. New York: MacMillan Publishing Co., 1987, p. 35.

[18] *Ibid.*, pp. 36, 58.

races...[19]

Interstate fears may, but do not necessarily, lead to war. Whether or not such fears remain contained or erupt into armed conflict depends in large part on the power and relative capabilities of the rival nation-states. Thucydides' realism (and later Morgenthau's) suggests that a city-state such as Sparta, or a nation-state such as Canada, must, and is expected to, "focus on states that could constitute effective threats, alone or in coalition with another, given the power at their disposal", based on the rational assumption that states seek to increase their power.[20] Accordingly, a nation-state is expected to devise policies meant to maintain its security and forward its national interests.

From Thucydides to Machiavelli and Hobbes, through to E.H. Carr, John Herz, and H.J. Morgenthau, a number of recurring key assumptions remain central to the theory of classical realism. Firstly, classical realism assumes that nation-states are both unitary (i.e. nation-states will espouse a single, integrated national policy on any given issue and thus voice it as single units within the international political forum) and the principal actors (i.e. nation-states are the main unit of analysis in the study of international relations) within the international system. Secondly, nation-states are rational actors (i.e. governments have consistent, ordered preferences, and perform cost/benefit analyses of all alternative policies in order to maximize their utility under the circumstances).[21] Certainly, misperceptions and lack of information render, in economic terms, "value-maximizing" rational decision-making practically improbable. Nation-states therefore content themselves with sub-

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[19] *Ibid.*, p. 36.

[20] Robert O. Keohane (Ed.) Neorealism and its Critics. New York: Columbia University Press, 1986, p.8.

[21] *Ibid.*, p. 11.

optimal, "satisficing", near-rational choices. Thirdly, realist theory assumes that a nation-state's primary concern is to ensure its security interests within an anarchic international system. Anarchy, here, means an absence of supranational authority, or, as Waltz explains, "a lack of order and of organization...(no state) is entitled to command; none is required to obey,"[22] and the discord that prevails is accounted for by fundamental conflicts of interests.[23] The international order, therefore, is characterized by independent, sovereign, and rational egoist nation-states for whom realpolitik is at the root of all decision-making. Realism is thus suspicious of any variety of collective security schemes and distrustful of efforts to premise foreign policy upon hypothetical values of world peace and international justice. Rational state actors cannot be expected to entrust their own security to another unitary actor in an international system in which sovereign states continue to be preoccupied with power and prestige notwithstanding the vulnerability of such preoccupation in the new era of economic globalization, scarcity, increased disruptive violence, and terrorism. One cannot underestimate, according to Grieco, the importance of worries about survival as motivations for state

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[22] Kenneth Waltz, Theory of International Politics. New York: Random House, 1979, pp.88-89. Also see Robert O. Keohane, After Hegemony: Cooperation and Discord in the World Political Economy. Princeton: Princeton University Press, 1984; and Hedley Bull, The Anarchical Society. New York: Columbia University Press, 1977. Consider Helen Milner, "The Assumption of Anarchy in International Relations Theory: A Critique." Review of International Relations Studies 1991, pp. 67-85, where Milner argues that the concept of anarchy has been overemphasized by realists while interdependence has been, unjustifiably, all but ignored. On the latter point, it should be noted that realists agree in the possibility of international cooperation, where they differ, however, is with respect to the "ease and likelihood of its occurrence" -- realists suggest that international cooperation is "harder to achieve, more difficult to maintain, and more dependent on state power" than liberal institutionalists would have us believe. See David A. Baldwin, (Ed.), Neorealism and Neoliberalism: The Contemporary Debate. New York: Columbia University Press, 1993, p. 5.

[23] Kenneth Waltz, Man, State and War. New York: Columbia University Press, 1959, cited in Keohane, *supra* note 21, p.7.

behaviour, which are a necessary consequence of anarchy.[24] Realists would concur with Oakshott's reknown statement that

> [i]n political activity then, men sail a boundless and bottomless sea...(The) enterprise is to keep afloat on an even keel; the sea is both friend and enemy; and the seamanship consists in using the resources of a traditional manner of behaviour in order to make a friend of every hostile occasion.[25]

The ability and/or desire of a nation-state to entrust its security to another is constrained because of the realist fear that other states may achieve various relative gains to its exclusion, and potentially to its detriment.[26] Classical realism's state-centric model emphasizes the nation-state's inescapable preoccupation with maintaining its security by whatever means necessary. Paul explains that, from the perspective of the realist,

> [m]aintenance of security is the most crucial aspect of state behaviour and individual states' foreign policy choices should invariably reflect this central concern.[27]

Generally, the means by which such security will be achieved, or at least by which states will strive

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[24] Joseph M. Grieco, "Anarchy and the Limits of Cooperation: A Realist Critique of the Newest Liberal Institutionalism", International Organization Vol. 42(3) (Summer 1988) pp. 497-498.

[25] M. Oakshott, Rationalism in Politics. London: Methuen, 1962, p.127, cited in John Garnett, "Strategic Studies and its Assumptions", in J. Baylis, K. Booth, J. Garnett, & P. Williams (2nd Ed.) Contemporary Strategy: Theories and Concepts. New York: Holmes & Meier, 1987, p. 10. Also see Thomas Hobbes' Leviathan, edited by C.B. MacPherson, London: Penguin Group, 1985, as one of the crowning achievements of Early Modern political philosophy, in which Hobbes considers the "state of nature" of humanity and extrapolates therefrom a conclusion on the nature of political society whereby mankind (read nation-states) is marked by a "perpetual and restless desire of Power after power, that ceaseth only in death," Ch. 11, p. 47, which serves as a basic starting point for realist theory.

[26] On the issue of relative versus absolute gains in the context of interstate relations, see Joseph M. Grieco, *supra* note 24, pp. 485-507.

[27] Paul, *supra* note 9, p. 3.

to achieve it, is via the building of military forces and arms races.[28] Given the assumptions of classical realism, nation-states are expected to become trapped in a security dilemma, since it is rational in a self-help system to develop policies that consider the "worst case scenario" vis-a-vis their rivals. In other words, in order to maintain its security, a state, assuming the worst, will seek to match or else surpass the military capabilities of its rivals, in which case its rivals will respond in kind, *ad infinitem*. This interstate rivalry has translated into a conception of world politics whereby unitary actors are said to compete "in the kind of state of nature that knows no restraints other than those which the changing necessities of the game and the shallow conveniences of the players impose."[29]

According to classical realist theory, therefore, any nation-state possessing the technological capacity to develop nuclear weapons indigenously, when faced with a security threat from an armed adversary, *should* initiate such a development program in order to deter the adversary in question from attempting any act of aggression. This begs the question did Canada's refusal to engage in such an initiative in the face of the Soviet nuclear (or superior conventional) threat to its national security suggest a failure in protecting its interests, or a failure to provide for its own security in light of the anarchic nature of the international system? Classical realism appears not to be able to adequately explain state choices when the issue becomes one of nuclear renunciation as opposed to acquisition -- its precepts and assumptions are unyielding and exceedingly pessimistic about the possibility that a nation-state may actually choose to renounce its nuclear option. Yet, not only has Canada refused to

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[28] *Ibid.*, Paul goes on to explain that the theoretical justification underlying such initiatives lies in the realist notion that security is best achieved as "peace through strength" as opposed to "peace through disarmament".

[29] Stanley Hoffman, The State of War: Essays on the Theory and Practice of International Politics. New York: Praeger, 1965, p. VII.

develop its latent capacity, but is unique in being the only nation-state in the world to rid itself, by its own volition, of nuclear weapons in the possession of its armed forces that belonged to a foreign power. Moreover, international regimes have been established to which Canada, along with numerous other nuclear threshold states, has surrendered some of its sovereignty. More specifically, in ratifying the Non-Proliferation Treaty (NPT), Canada had in essence created a further disincentive to acquisition of nuclear weapons by which it was bound. Certainly, any signatory could withdraw from the Treaty at will, though not without consequence. For Canada, the consequences of withdrawal would undoubtedly be international discreditation and condemnation, as well as domestic opposition.[30] For a small power intent on maintaining its international reputation and role as a peace broker, such consequences would be unacceptable. This sort of international cooperation is not easily accounted for by classical realist theory which, as discussed above, views nation-states as motivated by rational self-interest and fear of attack, an attack which may come about should one state foolishly allow the other to gain an upper hand in the struggle for survival and supremacy. The classical realist argument that international regimes (and the ensuing cooperation) survive only as long as the hegemonic powers which impose them has faltered empirically.[31] The question then inevitably arises

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[30] According to a 1988 public opinion poll, the great majority of Canadians unambiguously reject nuclear weapons for Canada (86%), up by roughly 15% from a 1985 CBC poll. This anti-nuclear stand would arguably translate into serious domestic opposition to a Canadian withdrawal from the NPT. M. Driedger & D. Munton, "Security, Arms Control and Defence: Public Attitudes in Canada." Working Paper #14, Canadian Institute for International Peace and Security (December 1988) p. 34. William Potter has argued that "fear of hostile domestic reaction and international public opinion" is perceived as a serious disincentive to nuclear proliferation by NPT members, in Nuclear Power and Non-Proliferation: An Interdisciplinary Perspective. Cambridge: Oelgeschlager, Gunn & Hain, 1982, p. 3.

[31] While hegemons have often played pivotal roles in creating "patterns of order", the relevance of hegemonic leadership in international regimes is increasingly questionable. Greater relevance may be awarded to the argument that "when shared interests are sufficiently important, and other key conditions are met, cooperation can emerge and regimes can be created without (or maintained after) hegemony," Keohane, *supra* note 22, p. 50.

how could Canada legitimately profess non-proliferation while, as will be discussed below, openly relying on the nuclear umbrella provided by its hegemonic neighbour for its security? Furthermore, classical realism cannot adequately explain the apparent inconsistency in Canadian foreign policy which, while being "internationalist" (or, liberal institutionalist) in nature, depends on the realist assumption that nuclear deterrence promotes peace and international systemic stability?

On the one hand exists Canada's purely realist assumptions of world politics where the Soviet Union was the principal threat to Canadian security and was best deterred from any act of aggression against Canada by the U.S. nuclear arsenal, which, according to the realist theory of hegemonic stability, provided an umbrella that extended over Canadian soil;

> [a] central tenet of Canadian defense thinking holds that Canada's only 'survival interests' is the prevention of nuclear war between the superpowers. This concept is met by the policy of strategic deterrence and, in particular, by Canada's defense of strategic deterrent arsenals in North America, as well as by Canada's contribution to the conventional defense of Western Europe.[32]

On the other hand exists Canada's historical "commitment...to forging an international order based on multilateralism," exercised as an alternative to hard-core realism via Canada's unequivocal support of international organizations (and particularly the United Nations).[33] There is a definite mixture of policy orientations in Canadian foreign and nuclear policy which has always placed successive Canadian governments in the unenviable position of having to strike a pragmatic balance between often contradictory policy initiatives meant to achieve contradictory objectives. It is without doubt

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[32] D. Bland & J. Young, "Trends in Canadian Security Policy and Commitments", Armed Forces and Society 15:1 (Fall 1988) p.116.

[33] A. Dorscht, G. Legare, *et al*, "Canada's International Role and Realism", International Perspectives (Nov./Dec. 1986), p. 7.

that Canada espouses a clearly realpolitik interpretation of international relations evidenced by its staunch defence of alliance commitments, the acceptance of the Soviet threat, as well as the dependence upon the U.S. nuclear umbrella. Concurrently, however, Canada places an obvious and high value on international cooperation by means of multilateral associations and the search for non-military solutions to international conflict.[34]

Canada's seemingly contradictory policies are the product of a traditional dualism in Canadian policy formulation, which poses a significant theoretical problem: it is unclear which theory could adequately explain this dualistic approach. While classical realism can explain Canada's realpolitik interpretation of international relations, it cannot provide adequate answers to our question why did Canada reject its nuclear option? Nor can it adequately explain Canadian involvement in international non-proliferation regimes and cooperation. On the other hand, liberal institutionalism or regime theory, as alternatives, while capable of explaining the Canadian penchant for international cooperation, provides no explanations for Canadian reliance on deterrence theory, alliance commitments, the acceptance of the Soviet threat, or bilateral military agreements with the United States. The danger here is that it may be assumed that we are required to proceed with our problem on a dichotomous basis: if classical realism can explain some but not all, and if liberal theories can explain some but not all, then it follows that we ought to engage both theories simultaneously to explain the case of Canada. This, however, is an unwarranted and problematic conclusion. The initial problem is that both theories are thus conspicuously unparsimonious. Another problem is that such heavy reliance on liberal theories necessarily requires one to adopt the idealist assumption that morality and good conscience play a significant role in state choices. There is, of course, no

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[34] *Ibid.*

convincing empirical or historical evidence to substantiate such an assumption. Certainly, there exists a tension of sorts within foreign policy between a nation's rational self-interest and questions of deontological morality for it may seem "relevant to ask whether effective policies are morally justified or, alternatively, whether morally defensible policies can be reconciled with the national interest, especially where security is involved".[35] The nuclear arms race undoubtedly generates an urgency to the debate as the nuclear threat demands, on the one hand, hard-core realist national security policies, and, the potentially apocalyptic devastation implicit in the use of nuclear weapons, on the other hand, necessitates an understanding of the moral responsibility involved.[36] Unfortunately, (nuclear weapons) policy is formulated by nation-states in pursuit of national self-interest -- weapons deployment and nuclear strategies are meant to further their own beliefs, histories, and commitments (however temporary these may be). To apply a universal rule of morality to the nuclear arms race may be a noble and philosophically sound objective, but how are we to apply "that which moralists talk about" to political entities and between two or more antagonistic nation-states? The outcome of international relations remains essentially a test of statist wills and capabilities, wherein diplomacy and self-restraint are the closest we may arrive to morality. In the realist tradition, questions of morality therefore are generally not considered.[37] Moreover, Katz accurately points out that once such an assumption is made

> [s]cholars would be faced with the...(problems) of explaining

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[35] K. Kepnis & D.T. Meyers, (Eds.), Political Realism and International Morality: Ethics in the Nuclear Age. Boulder: Westview Press, 1987, preface.

[36] *Ibid.*

[37] Robert Jervis, The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon. Ithaca: Cornell University Press, 1989, p.107.

> why states are able to transcend their short-term interests in some issue areas and not in others...(and) that scholars cannot accept (it) without discerning why realism, which has accurately portrayed international relations until this point in history, no longer serves as an adequate theory.[38]

Another difficulty that arises is that because traditional theories do not appear to adequately explain certain political phenomena such as the case of Canadian nuclear policy, some may now advocate the development of novel paradigms to fill in the gaps. However, to embark on such theory-building projects may not be the best solution in our case. If new issues and structural changes in world politics cause us to refocus our attention, perhaps, before developing new theories, we ought to recognize that traditional theories, rethought, may successfully account for seemingly inconsistent state choices. Evolution of traditional realist theory to adapt to an evolving international political realm and in its "quest for greater precision"[39] has been ongoing since the days of Thucydides, and even more markedly since the days of Woodrow Wilson and E.H. Carr, whose debate dominated that era's political discourse. Later, Carr's realism became Morgenthau's, whose paradigm in turn dominated until the 1950s when many of his ideas were used alongside some new ones in a modification of realism.[40]

The reason realism, even when modified to adapt to new contexts, continues to be a viable

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[38] S.H. Katz, "Fitting International Cooperation into Realism", Master's Thesis, McGill University, 1991, p.3.

[39] See Ole R. Holsti, "Models of International Relations: Perspectives on Conflict and Cooperation", in C.W. Kegley Jr. & E.R. Wittkopf, The Global Agenda: Issues and Perspectives. (3rd Ed.) New York: McGraw-Hill Inc., 1992, p.142.

[40] Realism continued to evolve and began to consider the ideas of "decision-making" analysis and Morton Kaplan's system-level approach, and later Waltz' structural realist ideas. On this see R. Maghroori and B. Ramberg, *supra* note 5, and James N. Rosenau,"Muddling, Meddling, and Modelling: Alternative Approches to the Study of World Politics in an Era of Rapid Change", Millenium: Journal of International Studies 8 (Autumn 1979) pp.130-144.

paradigm is because its original, and hitherto accurate, underlying assumptions about international relations remain unchanged and thus properly serves as a basic and consistent method of analyzing state choices. This means that we may potentially modify realist theory such that it does provide satisfactory explanations, which theories based on inaccurate idealist assumptions simply cannot do, thus reconciling, in our case, Canada's renunciation of nuclear weapons and its internationalist policies with realist theory.

It would be erroneous to suggest that Canada's renunciation of nuclear weapons and its support of international cooperative efforts is categorically incompatible with realist theory. Such a dismissive approach would presuppose that Canada's decision-making process is steered uniquely by a moralistic and ethical form of logic. Admittedly, however, in order to explain Canada's seemingly unpredictible behaviour, one would have to modify certain assumptions of traditional realist theory, in order to fit the case of Canada within a realist framework.

In his Theory of International Politics, Waltz develops a modified version of classical realism whereby it is argued that the world political system is characterized by "political structures (which define) the arrangement, or the ordering, of the parts of the system."[41] The political structures differ from each other depending on, *inter alia*, the relative power capabilities of the units which constitute the structure. The "positional picture", as Waltz terms it, of every state within the structure is then defined according to the distribution of power within the structure. This structural theory is applicable to military relationships as well as to the basic formulation of a nation-state's foreign policy -- what Waltz explains as a state's task of "managing" its international affairs. Keohane explains that

> The significance of Waltz's theory...lies in his...attempt to

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[41] Waltz, *supra* note 22, p. 73.

> systematize political realism into a rigorous, deductive systemic theory of international politics...referred to (here) as *neorealism*, to indicate both its intellectual affinity with the classical realism of Morgenthau and Herz and its elements of originality and distinctiveness.[42]

There is, according to neorealist theory, a distribution of power capabilities among the various unitary actors in the international system. It must be emphasized that while power capabilities are "a unit-level attribute", their distribution is a "system-level concept", and any change or variation in the distribution of power capabilities constitutes, therefore, a structural change.[43] Structural realism has properly and parsimoniously explained numerous international phenomena such as balance of power and Cold War bipolarity and, as Waltz has noted, "to the extent that dynamics of a system limit the freedom of its units, their behaviour and the outcomes of their behaviour become predictable."[44] To what extent, then, could neorealism explain (and predict) Canada's behaviour? The behaviour of states is strongly affected by the incentives and constraints provided by the international environment -- when the system changes, so do incentives and constraints, and so, therefore, do state choices.[45] Neorealism would thus expect the change in the post-World War II balance of power to have affected Canada's choices. The political structure is expected to be a principal determinant, providing Canada with incentives for self-restraint in the nuclear arms race, since Canada ought to have determined its interests and developed relevant strategies accordingly on the basis of Canada's own view of its position within the international system. Neorealism, based on the assumption that the unitary actors

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[42] Keohane, *supra* note 20, pp.15-16 (emphasis added).

[43] Holsti, *supra* note 39, p. 143.

[44] Waltz, *supra* note 22, p. 72.

[45] Keohane, *supra* note 22, p.26.

within the international system structure are both rational and self-interested, may provide the theoretical underpinning necessary to understand (and to predict) the response of Canadian leadership to the incentives imposed by the international environment. However, structural realism has conspicuously discounted the value of domestic politics in such "research programs". This insistence on maintaining its focus strictly upon system-level analyses at the expense of unit-level analyses has resulted in structural realism being unable to explain why different unitary actors sharing similar positions within the same structure fail to behave similarly. Moreover, while Waltzian structural realism does make a few allusions to the impact of systemic structure upon the action of states and state choices, the theory is mainly concerned with the constraining effect of systemic structure upon interaction processes among states and the range of international outcomes that emerge from these interactions. [46] Thus, Waltzian structural realism better explains the consequences of state choices rather than the choices themselves. Keohane accurately points out that, although structural realism is a valid theoretical basis from which to launch an analysis of (less-obvious) state choices, system-level theories cannot possibly be *perfect* predictors of state behaviour.[47]

> Since no system theory can be expected to (perfectly) account for the behaviour of the units, we also have to look at policies and the exercise of statepower -- topics that require detailed ...historical research.[48]

This suggests that our analysis would be incomplete without a trek beyond the system toward the unit itself, in an attempt to account for the dynamics of the domestic political scene in Canada as it related

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[46] Waltz, *supra* note 22, pp. 71-73.

[47] Robert O. Keohane, International Institutions and State Power: Essays in International Relations Theory. Boulder: Westview Press, 1989, p.8.

[48] *Ibid.*

to the nuclear question; i.e. to "emphasize the effects of domestic institutions and leadership on patterns of behaviour".[49] Thus would we be engaging a form of modified structural realism to determine the incentives for restraint which presented themselves to Canadian leadership. Although this form of modified structural realism is akin to the alternative theory of liberal institutionalism, the two differ in at least one very important respect: whereas liberal institutionalism emphasizes the impact and influence of international institutions and regimes on the decision-making power of nation-states, neorealism does not.[50] Liberal institutionalism is marked by the key tenet that while power relationships are an important element to be considered, the world political system is primarily characterized not by threats of force, but by "complex interdependence", which pushes self-interested nation-states to create and maintain various international regimes. This author is willing to accept the basic analytic position of those liberal institutionalists such as Keohane, Stein, and Jervis, who espouse a modified structural realist approach whereby it is accepted that the international system is one of "functionally symmetrical, power-maximizing states acting in an anarchic environment,"[51] while maintaining that

> [u]nder certain restrictive conditions involving the failure of individual action to secure Pareto-optimal outcomes, international regimes may have a significant impact even in an anarchic world.[52]

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[49] Keohane, *supra* note 22, p. 26.

[50] Both liberal institutionalists and neorealists share many important assumptions about world politics. Both theories begin their analysis at the systemic level, and both agree that state choices are best explained by understanding the international system to be fundamentally anarchic. Both theories equally posit that nation-states are both rational and self-interested actors.

[51] Stephen Krasner, " Structural Causes and Regime Consequences: Regimes as Intervening Variables," in Stephen Krasner (Ed.) International Regimes. Ithaca: Cornell Univesity Press, 1983, pp.1-2.

[52] *Ibid.*, p. 2.

Liberal institutionalists, therefore, argue that state choices are governed by "principles, norms, rules, and decision-making procedures around which actor expectations converge in a given issue-area."[53] The issue-area of concern here is horizontal nuclear proliferation; the actor in question is Canada, and the relevant international regime is the nuclear non-proliferation regime. The NPT and International Atomic Energy Agency (IAEA) have, arguably, served to "reduce verification costs, create iterativeness, and make it easier to punish cheaters."[54] They have also, arguably, altered the information available to the Canadian Government and the opportunities open to it; the Canadian commitment to the NPT could henceforth only be broken at an unacceptable cost to Canada's reputation – the regime changed the calculations of advantage that Canada made.[55] Meyer explains that members of the NPT assume "an international legal obligation not to manufacture nuclear weapons" and that such an obligation, juxtaposed to the "potentially severe repercussions" associated with withdrawal from the NPT, serves to alter state behaviour.[56] In other words, the regime itself altered Canada's interests and capabilities.[57] The problem with this explanation, however, is that the

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[53] *Ibid.*, p. 1.

[54] Grieco, *supra* note 24, p. 493.

[55] Keohane, *supra* note 22, p. 26. Keohane explains that the principles imposed by the international non-proliferation regime "define the purposes that their members are expected to pursue", namely, that horizontal nuclear proliferation is "dangerous" and undesirable. It follows, therefore, that NPT members must behave in a manner consistent with the principles propounded by the regime, i.e. to renounce nuclear weapons.

[56] Stephen Meyer, The Dynamics of Nuclear Proliferation. Chicago: University of Chicago Press, 1984, p. 69.

[57] See especially Arthur Stein, "Coordination and Collaboration: Regimes in an Anarchic World," in Stephen Krasner (Ed.), *supra* note 51, pp. 115-140.

assertion that the international nuclear non-proliferation regime acted as an *a priori* incentive for Canadian nuclear self-restraint is valid only *after* 1970, the date Canada ratified the Treaty, following nearly 25 years of Canadian nuclear policy formulation (and renunciation), which regime theory cannot account for.

Canada had clearly renounced nuclear weapons well before the non-proliferation regime came into existence. Paul asks if the choice had already been made to renounce nuclear weapons before joining the regime "how much independent effect (did) that regime exert on (Canada's) nuclear policy?"[58] The non-proliferation regime is presumably better qualified as a *reflection* of Canadian policy and attitudes as opposed to a constraint in the strictest sense. The regime only began to regulate Canadian behaviour once Canada chose to adhere to it and thus constrain itself by galvanizing its non-nuclear stance. Prior to that event, it is apparent that only our modified structural realist approach, that considers the deliberations of Canadian leadership, may provide us with a more concrete and parsimonious explanation to the question why did Canada consistently choose to reject the acquisition or indigenous development of nuclear weapons since World War II? On the one hand, liberal institutionalism seeks to explain state choices and behaviour by moving beyond the nation-state, that is, by devising new international institutions and regimes, by reinterpreting the principles of state sovereignty and by challenging the "state as actor" model. A major problem here is that, while liberal institutionalists admit that anarchy and power are key variables in the analysis of state choices, the normative implications of the theory lie in contradiction with the constraints "which weigh on the statesman, responsible for his country's interests in a world in which the use of force remains possible

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[58] Paul, *supra* note 9, p. 10.

and legitimate...".[59] It is very difficult to understand internationalist policies or renunciation of nuclear weapons as a transformation of anarchy into a consensually-based world order without the necessary homogeneity of states, cultures and constitutional practices, and international and binding respect for the same legal and moral ideas. [60] The traditional version of structural realist theory seeks, on the other hand, to explain state choices by reinvigorating classical realism via the development of propositions "based upon the disaggregation of independent and dependent variables, and by integrating...classical realist theory into a contemporary framework based upon comparative analysis".[61] For structural realism, "power remains a key variable, although it exists less as an end in itself than as a necessary and inevitable component of a political relationship".[62] Indeed, according to Dougherty and Pfaltzgraff,

> [t]he (neorealist) approach represents an effort not only to draw from classical realism those elements of a theory adequate to the world...but also to link conceptually other theoretical efforts. Thus the structural realism of...Waltz draws heavily upon systems constructs and the neorealism of Kindermann...has as its basis a constellation, or configuration, consisting of a 'system of interaction -- relations between states and other action-systems of international politics at a given moment or within a

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[59] Phrase borrowed from Stanley Hoffman, "Raymond Aron and the Theory of International Relations", International Studies Quarterly (March 1985) p. 21. Hoffman's work was in fact a critique of Raymond Aron's theoretical framework which posited that realists were "located on the margin of the idealist situation" and that immorality, according to Aron, was that which arose when when the statesman followed his heart without regard for consequences, thus the morality of "statesman" differed from that of "citizen".

[60] James D. Dougherty & Robert L. Pfaltzgraff, Jr., Contending Theories of International Relations: A Comprehensive Survey (3rd Ed.). New York: Harper Collins Publishers Inc., 1990, p. 118.

[61] *Ibid.*, p. 119.

[62] *Ibid.*

defined period of history...'.[63]

If, therefore, classical realism's point of departure is the anarchic nature of man and his world, neorealism begins with the international system, that is, the political relationships which exist between members of the international system are shaped by more than the mere sum-total of their respective foreign policies. Our focus, therefore, is directed towards the units that make up the system. Different units behave differently with one another, and produce different outcomes based on their relative power and capabilities with the ultimate aim of enhancing their power and security and thus their position within the system. In other words, the structure of this self-help system (units and their relative capabilities) will shape how states interact and the choices they make. However, while structural realism provides us with a sound underlying theoretical framework upon which to base our analysis of Canada's nuclear renunciation, it suffers us one major setback: the theory does not concern itself with the units of the system at the national level. Because the units shape the system's structure, oddities occurring within the system must originate in its parts. We seek, therefore, to engage a more reductionist form of neorealism which could serve to explain Canada's nuclear choices by reference to the actions of the unit itself and its internal characteristics.

The decision to proceed with a nuclear weapons program, or to oppose it, depends upon the expectations of gain or loss held by the unit. Rather than rely upon a scheme which posits altruistic motives for forgoing the bomb or more generally as conditioners in national security policy

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[63] *Ibid.*, p. 119. Reference is made to Kindermann's Munich School of Neorealism. See Gottfried-Karl Kindermann, "The Munich School of Neorealism and International Politics", [unpublished] University of Munich, 1985, cited in Dougherty & Pflatzgraff, *supra*. The authors go on to explain that the ensuing neorealist approach "contains as interdependent categories of inquiry: (1) system and decision (leadership); (2) interest and power; (3) perception and reality; (4) cooperation and conflict (behavioural strategy); (5) norm and advantage".

formulation, it is preferable to focus on power and rational self-interest rather than values which are inherently too complex to be described in terms as simple as, for example, a "Canadian desire for disarmament". Power is not separable from Canadian internationalist policies,[64] nor is it separable from Canada's rejection of the bomb.

The propensity of one state or another to expand its territory, extend its political influence, enhance its prestige and/or seek economic dominance remains a function of its power. According to Gilpin, states engage in a cost-benefit analysis about alternative courses of action available to them.[65] To the extent that the benefits of nuclear acquisition or renunciation, as the case may be, exceed the costs, a state is likely to attempt to make changes to the international system. Thus, Gilpin seeks to refine the rationality assumption of classical realism. The system is in "equilibrium" when its dominant states are satisfied with the status quo and the network of relationships which they maintain. As will be discussed below, in formulating its nuclear policy, Canada sought to bring self-interested change to the system, and in doing so was required to trade-off some objectives for others, in keeping with the principle of "satisficing".

State choices, according to Easton, constitute the "outputs" of the political system, "by which values are authoritatively allocated within a given society".[66] In deciding whether or not to acquire

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[64] International political integration and cooperation proceed as a result of rational choice as well. Canadian policy-makers have supported it, having expectations of gain from activity within a supranational organizational framework, as a function of Canada's relative capabilities and status as a "meddling" middle power.

[65] Robert Gilpin, War and Change in World Politics. New York: Cambridge University Press, 1981, pp. 9-11, also cited in Dougherty & Pflatzgraff, *supra* note 60, p.121.

[66] David Easton, The Political System. New York: Knopf, 1953, p. 129, also cited in Dougherty & Pflatzgraff, *supra* note 60, pp. 468, 474.

a new weapons system in the formulation of a state's defence policy, a self-explanatory technique generally known as "cost effectiveness" has traditionally been employed.[67] But beyond the latter, in making such policy decisions states are usually confronted with situations in which uncertainty and disagreement exist over the correct analysis of the incentives versus disincentives which characterize, in the case of nuclear weapons, the international and domestic political context in which profileration decisions are made. Uncertainty and disagreement will also exist over what alternatives are actually available, the consequences of the choices made, and the values which ought to serve in directing the decision-making process -- that is, "the values that should serve as criteria for ranking the various alternatives from most to least preferred".[68] State choices are therefore more than simply an abstract choice among utility-maximizing alternatives, but rather "an incremental process containing partial choices and compromises among competing organizational interests and bureaucratic pressures".[69] The idea here is to direct one's attention away from the anthropomorphic state as decision-maker towards the specific decision-makers who act in the name of the state as a methodological choice in the hope that the greater precision would be more amenable to both systemic analysis and to deciphering the Canadian experience.[70]

In international relations theory, the fact of rational self-interested actors in an anarchic system implies that foreign policy decisions are made based in large part on the conceptions of the state's role

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[67] *Ibid.*

[68] *Ibid.*, p. 469.

[69] *Ibid.*

[70] Consider R.C. Snyder, H.W. Bruck & B. Sapin, (Eds.), Foreign Policy Decision-Making. New York: Free Press, 1963, and M.A. East, S.A. Salmore & C.F. Hermann, Why Nations Act: Theoretical Perspectives for Comparative Foreign Policy Studies. London: Sage Publications, 1978.

or perceived position in the international system, the state's domestic needs and demands, as well as critical events and trends in the external environment.[71] These variables inevitably have an impact on the way policy-makers decide what should be the proper international orientation of the nation-state in question. This is certainly not a novel approach to exploring state choices: the initial impetus for the approach is provided by Holsti's "exploration of the relationships between national role conceptions and patterns of participation in international politics" as a method of explaining state choices and foreign policy.[72] According to Walker, there is considerable utility in engaging this (or similar forms of) decision-making and role theory for understanding state choices; the potential utility "appears to be threefold":

> [i]t has descriptive, organizational, and explanatory value. Descriptively, the concepts associated with (this sort of) analysis provide a vocabulary of images which can focus upon foreign policy behaviour at the national level of analysis, shift down to the individual level of analysis, and also move up to the systemic level of analysis...Organizationally, the (relevant) concepts...permit the analysis to adopt either a structure-oritented or a process oriented perspective.[73]

Thus, our approach offers "multilevel descriptive power", and, allows for a "multidimensional scope"

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[71] K. Holsti, *infra* note 72, pp. 238-239.

[72] K. Holsti, "National Role Conceptions in the Study of Foreign Policy", International Studies Quarterly 14 pp.233-309, cited in Stephen G. Walker, (Ed.), Role Theory and Foreign Policy Analysis. Durham: Duke University Press, 1987, pp. 1,5. This approach also remains in keeping with the works of K.W. Deutsch, The Analysis of International Relations. Englewood Cliffs, N.J.: Prentice Hall, 1968, and, J.N. Rosenau, Domestic Sources of Foreign Policy. New York: Free Press, 1967. International relations theory increasingly makes reference to national roles as possible causal variables in the operation of international systems or in explaining the foreign policy of individual nation-states; traditional theories being unable to fully reveal or explain the variations in behaviour observable in different sets of relationships into which states enter and in unusual choices which states make. Role and decision-making theory therefore allows one to construct a typology of national roles that is more sensitive to these variations in state behaviour.

[73] Walker, *supra* at 2.

in the explanation of (nuclear) policy and state behaviour which transcends the "narrow conceptualization" of state behaviour and choices as a continuum of war versus peace, conflict versus cooperation types of behaviour.[74] The incorporation of decision-making theory and role analysis into the larger theory of neorealism appears to enhance attempts to explain state behaviour because it facilitates the analysis of domestic (and psychological) variables which inevitably intervene between foreign/nuclear policy and the emphasis upon variables located in the international realm.

Our theoretical approach ought to anticipate, therefore, whatever incentives for restraint are divulged in our examination of Canadian nuclear policy formulation, based on decision-makers' (especially executive leadership's) conception of Canada's role and position in the international system, a conception that emphasized sovereignty, enhancement of prestige and gaining of international influence without the compromising of national security, beginning with the governments of Mackenzie King (1935-1948) and Louis Saint-Laurent (1948-1957), and proceeding with the governments of J.G. Diefenbaker (when American-owned nuclear weapons were accepted for Canada), Lester B. Pearson (when they were placed in the possession of Canadian armed forces), and Pierre E. Trudeau (when they were dismantled and returned to their owners).

III- Explaining the Case of Canada

An astonishingly small and fragmented amount of literature has been dedicated to the politics of Canadian nuclear non-proliferation. This strikes as odd, especially when considering Canada's intimate (military) relationship with the U.S. and its *unique* quality of having rid itself of nuclear

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[74] *Ibid.*

weapons in its possession belonging to the U.S., against the "better counsel" of its American partner. This interesting phenomenon has been largely neglected by scholars in favour of redundant analyses of the already saturated study of the arms races between the superpowers, India and Pakistan, and the well-developed studies on Israel, China, and the Koreas among others. If, however, the global desirability of assuring energy and security requirements while limiting the spread of nuclear weapons is to be advanced, then the conditions which affect a state's choices in this realm must be thoroughly understood. In order to address the issue of proliferation management and control, efforts must be made to assess the importance of alternative domestic and international proliferation incentives and disincentives,[75] which demads that gaps in scholarship such as the one addressed in this thesis be filled.

A. Why States "Go" and "Don't Go Nuclear".

Meyer explains that latent nuclear power capabilities may be acquired in one of two ways: firstly, as the result of an "intentional effort", or, secondly, as a "by-product of industrial and economic development", that is, unintentionally.[76] Meyer further explains, however, that irrespective of the method by which states acquire their latent capacities,

> [T]he capstone of the nuclear proliferation process is the acquisition of functional nuclear weapons, something that could only come about from an explicit government decision -- a proliferation decision -- to transform a latent capacity into an

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[75] William C. Potter, Nuclear Power and Nonproliferation: An Interdisciplinary Perspective. Cambridge: Oelgeschlager, Gunn & Hain, Publishers Inc., 1982, p. 131.

[76] Meyer, *supra* note 56, pp. 5-6. Meyer cites Sweden as an example of a state which made an explicit and intentional effort to develop a latent nuclear power capability and suggests that Japan is an example of a state which developed a latent capability as a by-product of its "peaceful atoms" program.

operational capability.[77]

The question, then, inevitably arises: why do states make proliferation decisions? From this perspective we may attempt to narrow our focus to why Canada decided against proliferation, and to what extent such a decision may be anticipated and explained, theoretically, by our modified structural realist approach.

That the question why do states go nuclear is considerably problematic is less than obvious, regardless of the simple and clear formulation of the question. Strong suggests that it can be quite difficult to pinpoint the moment at which a nuclear weapons country actually made its proliferation decision. [78] *A fortiori*, it ought to be more difficult to determine when a non-nuclear country with a latent capability decided against proliferation. Moreover, "even if we could comprehend the chronology and penetrate the secrecy of nuclear decision-making," we would remain faced with the plethora of conspicuously unparsimonious hypotheses all forwarding an alternative set of explanations for the decision to go (or not to go) nuclear.[79] Potter explains that

> [t]he literature on nuclear proliferation presents a wide assortment of largely speculative and often contradictory insights on why nations embark or refrain from embarking on paths to acquire nuclear weapons.[80]

The problem here is that to consider every conceivable variable without awarding any overriding

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[77] *Ibid.*, p. 6. Meyer goes on to explain that "a proliferation decision may or may not lead ultimately to nuclear weapons", as technical problems and foreign efforts to halt such development may come into play. Decision and outcome are therefore distinguished.

[78] Robert A. Strong, "The Nuclear Weapon States: Why They Went Nuclear," cited in Potter, *supra* note 75 , p. 5.

[79] *Ibid.*

[80] Potter, *supra* note 75, pp. 134-135.

salience to any one or group of decision-making variables arguably precludes any meaningful analysis of the state under observation. While admitting that political decision-making is contingent upon numerous variables that "force the analyst to consider the interplay of reasons, interests and perceptions,"[81] we cannot, however, content ourselves with non-rigorous and purely tentative conclusions about Canadian nuclear policy. A thorough examination of the history of Canadian nuclear policy formulation will reveal "recurring themes, arguments and circumstances"[82] which will allow us to forward a more narrow and parsimonious set of hypotheses to our research question.

Table 1 provides a list of the most commonly cited proliferation determinants and distinguishes between national prerequisites, underlying pressures, underlying contraints, and situational variables.[83] Potter further subdivides the underlying pressures and constraints for acquiring nuclear weapons relative to military or politico-economic state pressures both internally and externally to the state (see Table 2). This categorization provides us with four main rubrics under which to list these various incentives and disincentives for proliferation: domestic security, international security, domestic politics, and international politics. Many of the incentives and disincentives listed provide plausible explanations for Canadian nuclear policy, while others may be immediately discounted. The category of national prerequisites presupposes that a state's decision to go nuclear rests on that state's economic and technological capabilities. It is argued by, among others, Hedley Bull, that a state of relative wealth possessing the requisite expertise to develop nuclear weapons will be inclined to do

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[81] Strong, *supra* note 78.

[82] *Ibid.*, p.6.

[83] Meyer provides an equally comprehensive list of determinants. His motivational hypothesis, technological imperative and "sui generis" categories essentially encompass the same set of determinants as Potter under different rubrics.

so.[84] Empirically, however, this determinant has only proven to be partially accurate. Kegley reports that while higher military expenditures correspond to a slight to moderate propensity toward proliferation decisions, such decisions are unconnected to either wealth or technological capability.[85] Potter points out, in addition, that

> [T]he ability to predict national postures toward proliferation based on national economic wealth, scientific expertise, and technological skills has been eroded by the increased accessibility on a global scale of both nuclear technology and fissile material. This trend has led some analysts to abandon altogether the notion of indigenous prerequisites or necessary conditions for weapons proliferation...[86]

Meyer's alternative "technological imperative" hypothesis posits that a country with the technological capacity to produce nuclear weapons will inevitably proceed with such development, and essentially be incapable of renouncing this option due in large part to the irresistible technological momentum

TABLE 1

DETERMINANTS	ORIENTATION	ILLUSTRATIVE SOURCES
1. *NATIONAL PREREQUISITES*		
-Economic Wealth	Internal	Bull (1961), Schwab (1969)
-Scientific and Technological expertise	Internal	Barnaby (1969)
2. *UNDERLYING PRESSURES*		
-Deterrence	External	Beaton and Maddox (1962), Dunn and Kahn (1976), Epstein (1977, 1985), Greenwood (1977), Quester (1973), Rosecrance (1964), Mueller (1967) et al.
-Warfare Advantage and Defense	External	(same as deterrence)

[84] Hedley Bull, The Control of the Arms Race. New York: Praeger, 1961.

[85] Charles Kegley, "International and Domestic Correlates of Nuclear Proliferation: A Comparative Analysis," Korea and World Affairs (1980) pp. 5-37.

[86] Potter, *supra* note 75, p.135.

-Weapon of Last Resort	External	Dunn and Kahn (1976), Hasel Korn (1974), Harkavy (1977)
-Coercion	External	Dunn and Kahn (1976)
-International Status/Prestige	External	(same as deterrence)
-Assertion of Autonomy and Influence	External	Beaton and Maddox (1962), Epstein (1977, 1985), Kapur (1979), Rosecrance (1964), et al.
-Economic Spillover	Internal	Beaton and Maddox (1962), Dunn and Kahn (1976), Epstein (1977, 1985), Greenwood (1977), Quester (1973), Rosecrance (1964), et al.
-Domestic Politics	Internal	Dunn and Kahn (1976), Kapur (1979), et al.
-Technological Momentum	Internal	Dunn and Kahn (1976), Rosecrance (1977), Meyer (1984), et al.
3. *UNDERLYING CONSTRAINTS*		
-Military Reaction by Other States	External	Dunn and Kahn (1976), Epstein (1977), Green wood (1972), Quester (1973), et al.
-Strategic Credibility Gap	External	Dunn and Kahn (1976), Epstein (1977), Greenwood (1977), Quester (1973), Rosecrance (1964).
-Absence of Perceived Threat	External	Quester (1973), Rosecrance (1964), et al.
-International Norms	External	Epstein (1977, 1985), Greenwood (1977), Quester (1973).
-Economic and Political Sanctions	External	Dunn and Kahn (1976), Epstein (1977), Greenwood (1977), et al.
-Economic costs	Internal	Dunn and Kahn (1976), Greenwood (1977), Steiner (1977), Quester (1973), et al.
-Public Opinion	Internal	Dunn and Kahn (1976), Greenwood (1977), Quester (1973), et al.
-Bureaucratic Politics	Internal	Betts (1980), Kapur (1979), Rosecrance (1964), et al.
-Unauthorized Seizure	Internal	Dunn and Kahn (1976), Greenwood (1977)
4. *SITUATIONAL VARIABLES*		
-International Crisis	External	Dunn and Kahn (1976)
-Weakening of Security Guarantees	External	Dunn and Kahn (1976), Rosecrance (1964), Greenwood (1977), et al.
-Increased Accessibility of Nuclear Materials	Internal/External	Dunn and Kahn (1976), Ford/Mitre (1977), Wohlstetter (1979) et al.
-Vertical Proliferation	External	Kapur (1979), Schwab (1969), et al.
-Domestic Crisis and Leadership Change	Internal	Dunn and Kahn (1976), Kapur (1979), et al.

Source: Potter, note 75, pp. 132-134. Modifications by the author.

of such progress and the compelling nature of such a "challenge".[87] The problem with Meyer's hypothesis is that it is simply not substantiated historically, and more particularly fails to explain the case of Canada which has held this technological imperative in check for over half a century.[88]

TABLE 2	INTERNAL	EXTERNAL
MILITARY	Domestic Security	International Security
POLITICO-ECONOMIC	Domestic Politics	International Politics

Source: Potter, note 75, p. 137.

Among the various underlying pressures, the deterrence of adversaries is perhaps the most significant proliferation incentive. Waltz argues that as the cost of war rises, and eventually outweighs potential gains, that is, upon the realization that any victory in war would be pyrrhic, a state with aggressive intents is more likely to reconsider its offensive strategy.[89] The massive destructive capability of even the most rudimentary and unsophisticated nuclear weapons affects the calculations made by states in the formulation of their military strategy. In the self-help system of an anarchic world, therefore, the deterrent value of nuclear weapons appears inestimable. From this perspective, nuclear weapons essentially become a "second force working for peace",[90] by successfully deterring states from acts of aggression from fear of a nuclear retaliatory or defensive strike. The stand-off scenario paralyzes the adversaries and forces a neutralizing peace. History hitherto supports the

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[87] Meyer, *supra* note 56, pp. 9-10.

[88] Meyer attempts to compensate for his hypothesis' inability to account for the behaviour of states such as Canada by arguing that, although Canada has not *yet* succumbed to the temptation, eventually it will.

[89] Waltz, *supra* note 4, p. 4.

[90] *Ibid.*, p. 3.

notion of the deterrent value of nuclear weapons. In fact, the stability of Cold War bipolarity is generally attributed to the nuclear deterrence strategies adopted by the Western and Communist blocs.[91]

As a country with the financial and technological capability to convert its latent nuclear capability into an indigenous nuclear weapons program, and faced with the Soviet nuclear threat to its security, Canada ought to have developed its own "second strike" arsenal of weapons to deter any act of aggression contemplated by the Soviet Union. While Canada's refusal to do so poses a problem for classical realists, structural realists argue that such refusal is comprehensible under certain specific circumstances; that refusal should be a function of a state's relative capabilities and its role within the international system.[92] According to Paul, "alliance relationships could provide states with nuclear umbrellas".[93] This argument provides us with a highly plausible explanation for Canada's refusal to develop a deterrent arsenal: the deterrence effected by the U.S. nuclear arsenal may have been perceived by Canadian leadership as "extending" over Canada, as would a metaphorical nuclear umbrella, thus allowing Canada to rely on the nuclear protection of the United States and forgo the conversion of its latent nuclear capability into a functional arsenal of weapons. The question, addressed below, remains whether or not Canadian leadership actually considered the U.S. nuclear umbrella in its decision-making process. Extended deterrence of this sort was in fact considered by France and the United kingdom, allies of the United States throughout the Cold War, and

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[91] See especially Kenneth Waltz, "The Stability of a Bipolar World," Daedalus (Summer 1964) Vol. 93. No. 3, pp. 881-909.

[92] Paul, *supra* note 9, page 3.

[93] *Ibid.*

subsequently discounted as non-credible, hence the development of French and British nuclear weapons programs.

It has been suggested that small and middle powers such as Canada will opt for the development of a small tactical nuclear force to "defend against nuclear or conventional attack by a superpower or regional adversary, particularly in the absence of credible security guarantees".[94] Little debate is necessary to argue that Canada has never had to consider (at least in this century) an attack of any kind by its only regional neighbour. The quest for tactical nuclear weapons for the purposes of warfare advantage or defense would only have been considered for fear of a Soviet superpower attack, and this only in the absence of a credible U.S. nuclear umbrella. To conclude that the U.S. nuclear umbrella was not credible, in the face of Canada's nuclear renunciation, would essentially falsify the preferred theoretical approach and hypotheses of this paper.

The motivation to possess a weapon of last resort is intimately related to the notion of warfare advantage and defense, whereby a state facing imminent and complete destruction at the hands of an adversary would choose to escalate the conflict to unacceptable levels and achieve what has been aptly termed "Mutually Assured Destruction", or MAD. If the U.S. nuclear umbrella was in fact credible to Canadian leadership, a MAD situation was essentially guaranteed. The cost to the Soviet Union of an attack on Canada would have clearly outweighed any potential gains.

The last of the international security proliferation incentives, coercion, emphasizes the "compulsion" to develop nuclear weapons to counter the real or perceived threats of non-nuclear

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[94] Potter, *supra* note 75, p. 137. Also see R. Robert Sandoval, "Consider the Case of the Porcupine: Another View of Nuclear Proliferation," Bulletin of the Atomic Scientists (May 1976), p. 19, cited in Potter.

regional states (or adversaries).[95] This sort of "nuclear blackmail...may be percieved as a desirable policy (option) for the leaders of certain 'crazy states' as well as those facing the prospect of a long-term deterioration of their security vis-a-vis non-nuclear opponents."[96] Suffice it to say, with respect to this particular incentive, that no such compulsion has been experienced by Canada nor can it be seriously considered for obvious reasons: neither has Canada been faced by a threatening non-nuclear regional adversary, nor would the label of "crazy state", usually reserved for totalitarian dictatorships, be applicable.

The destructive capacity of nuclear weapons commands significant international attention. Just as large and powerful conventional military forces afford a form of international prestige and recognition, so does, therefore, the possession of weapons of mass destruction, particularly for small and middle powers with lesser conventional forces, often of little strategic value. Nuclear power status confers prestige in large part because it is a demonstration of scientific and industrial might, and to a lesser extent because of added military strength.[97] Nuclear weapons may be seen as a middle power's vehicle to achieving, if not "great" power, at least "meddling" power status, with greater international responsibilities and diplomatic leverage. Potter argues that this form of international prestige is of particular importance for "potential Third World proliferators who despair over gross inequities in the global distribution of wealth and power", from whose vantage point nuclear weapons

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[95] *Ibid.*, p. 138.

[96] *Ibid.* Also see Yehezkel Dror, Crazy States. Lexington: Lexington Books, 1971.

[97] See B. W. Augenstein, "The Chinese and French Programs for the Development of National Nuclear Forces," Orbis Vol. 11, No. 3, (1967); Shyam Bhatia, "The Nuclear Weapons Lobby in India After 1964", Institute for Defense Studies and Analyses Journal Vol. 6, No. 1, (July 1973), and W. Perry & S. Kern, "The Brazilian Nuclear Program in a Foreign Policy Context," Comparative Strategy Vol. 1, No. 1 (1978).

may allow to reassert their position in the world order.[98] Beyond the desire to redress economic inequities and enhance their international diplomatic positions, non-nuclear states may seek nuclear weapons to assert political independence from a regional hegemon and to demonstrate an ability to resist external political pressures, especially from nuclear adversaries. While this incentive to express one's sovereignty is presented by Potter as an independent subgroup of international political incentives, this author prefers to view international prestige and the search for political autonomy as inseparable components of a single prestige variable. This agrees with Meyer's position that the prestige incentive experienced by a middle or lesser power involved in a "military alliance with a nuclear weapons power" is based on the superimposition of two proliferation incentives:

> ...[a] nation's desire to enhance its bargaining position within an alliance with a nuclear power, and its desire to assert politico-military independence. In both instances the underlying conditions are the same. A country perceives itself to be in an inferior position within an alliance structure. In particular, the dominant power is a nuclear power. All else equal, the acquisition of atomic weapons would theoretically increase the military significance of the weaker power -- thereby enhancing its status within the alliance.[99]

Canada's military alliance with the United States appears, therefore, to have been fertile ground for a prestige incentive to motivate Canadian leadership to make a proliferation decision nothwithstanding the nuclear umbrella provided by its ally. When one considers that, although maintaining its alliance with the United States had always been an issue of relative concern, the

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[98] Potter, *supra* note 75, p. 139. Potter offers the $200 million increase in foreign aid to India less than 30 days following its 1974 nuclear explosion as a case in point, citing Ted Greenwood, "Discouraging Proliferation in the Next Decade and Beyond", in Greenwood *et al*, Nuclear Proliferation: Motivations, Capabilities and Strategies for Control. New York: McGraw-Hill, p. 51, who adds that "changes in attitude on the part of the other states...yield some secondary benefits" in favour of the proliferator.

[99] Meyer, *supra* note 56, p.55-56.

"closeness" and apparent "permanency" of this relationship has traditionally been viewed with suspicion -- as a threat to Canadian independence -- by Canadian decision-makers and the populace alike,[100] the conclusion that the development of an indigenous nuclear weapons program would have reduced or else eliminated this perceived threat to Canadian independence seems warranted. Mueller agrees with this assertion when he argues that "one of the most important incentives for the attainment of a nuclear force has been the feeling that possession of nuclear weapons will guarantee independence for the smaller power from the 'core' power."[101] Paul explains that from a classical realist perspective,

> ...[n]uclear weapons could be especially useful...in not only deterring aggressions but also increasing national prestige and global status.[102]

Classical realists would be at a loss, therefore, to explain why this motivating condition was not a sufficient incentive for Canada to go nuclear. Structural realists, for their part, while arguing that the extended deterrence provided by the United States was sufficient to convince Canadian leaders of the "futility" of acquiring nuclear weapons,[103] cannot adequately explain why this dissuasive factor carried any more weight than the prestige incentive, particularly in view of the fact that while extended deterrence ensured a non-nuclear Canada's security, a nuclear Canada would have ensured its own security and simultaneously added to its national prestige and status within the international system.

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[100] Brian Cuthbertson, Canadian Military Independence in the Age of the Superpowers. Toronto: Fitzhenry & Whiteside, 1977, preface.

[101] John E. Mueller, "Incentives for Restraint: Canada as a Nonnuclear Power." Orbis 11:3 (Fall 1967) p. 868.

[102] Paul, *supra* note 9, p.3.

[103] *Ibid.*

Our modified structural realist approach, however, would have us delve into an analysis of the unit, as opposed to a strictly systemic analysis, in order to clarify this difficulty. Was the prestige variable ever truly pondered by Canadian leaders? If so, to what extent did it figure in the calculation to renounce nuclear weapons? These questions are addressed in part III (b) of this study.

Both Canada and the United States have pursued and promoted the research and development of peaceful applications of nuclear technology, and have exported the products of said research and development abroad.[104] They have simultaneously, however, condemned and laboured to halt the horizontal proliferation of nuclear weapons. For long this dichotomy was based on the distinction created by the U.S. and Canada between "atoms for war" and "atoms for peace", whereby the "economic potential" of peaceful atomic development was exalted. A state could benefit and bolster its economy, the argument suggests, via cheap nuclear technologies directed toward non-military uses: medicine, residential, commercial and industrial energy supplies, large scale excavations and construction, mining, and even space exploration. Although it has been shown that the atoms for peace/atoms for war distinction is a misleading one, that Peaceful Nuclear Explosions (PNEs) are not cost-effective in the least and pose serious environmental dangers and fatal health hazards (ecosystem destruction and radiation poisoning), many potential proliferators have clung to the notion of PNEs, some argue, in anticipation of some form of economic spillover.[105] More probable, however, is the anticipation by these potential proliferators, not of economic spillover, but of acquiring the requisite hardware and technological skill and expertise to convert their peaceful atoms programs into a

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[104] Potter, *supra* note 75, p. XIII.

[105] *Ibid.*, pp. 141-142. Also see Henry Rowen, "The Economics of Peaceful Nuclear Explosions", Report Prepared for the International Atomic Energy Authority, 1976; William Epstein, The Last Chance: Nuclear Proliferation and Arms Control. New York: Macmillan, 1976, pp. 13-45, 171-180.

nuclear weapons program.

> The civilian nuclear power industry is an important potential source of weapons materials and provides relevant training and experience for technical personnel. The development of a nuclear power industry therefore would necessarily reduce the time required for a country to build a nuclear explosive once it decided to do so.[106]

The 1974 Indian nuclear explosion was the culmination of a so-called peaceful atomic program which began in 1956 when India and Canada agreed to nuclear cooperation for the construction and development of the CIRUS heavy water reactor, for the 1958 construction of the Trombay reprocessing facility, and later, in 1965, the Purnima reactor.[107] Economic spillover may have been an incentive for Canada to develop and maintain a nuclear energy program (less so for domestic use, more so for export purposes), but an economic spillover appears never to have figured as an incentive to develop nuclear weapons (which demands a nuclear industry of far greater magnitude, thus resulting in greater economic spillover than a smaller export market-oriented nuclear industry could provide).[108] The question adressed below is why not? What interests would Canada have

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[106] Greenwood, *supra* note 98, p. 81.

[107] On India and the nuclear arms race, see Mitchell Reiss, *supra* note 2, pp.204-243; Walter B. Wentz, *supra* note 2, pp. 97-103; William C. Potter, *supra* note 75, pp. 154-157; Ashok Kapur, India's Nuclear Option: Atomic Diplomacy & Decision-Making. New York: Praeger, 1976; K. Subrahmanyam, "India: Keeping the Option Open", in R. M. Lawrence and J. Larus (Eds). Nuclear Proliferation Phase II. Lawrence: Kansas University Press, 1974, pp. 112-148; *et al.*

[108] Greenwood suggests that Canada "seems motivated...by a desire to assure the legitimacy and acceptance of its unique reactor design...by selling to other countries," *supra* note 98, p. 87. Canada has traditionally justified selling nuclear technology while concurrently professing non-proliferation by arguing that Canada denies the supply of facilities required for weapons-grade production; that by providing other states with Canadian technology, these other states do not feel compelled to develop the technology on their own, which allows for a regulated transfer of technology; and that international safeguards and guidelines must be obeyed for continued Canadian cooperation with the purchaser. It is interesting to note here the price paid by India for its 1974 explosion: its nuclear electric development was significantly slowed by the Canadian decision to unilaterally "terminate all nuclear collaboration" with India regardless of the "still higher

compromised had it explored the economic spillover of a nuclear weapons program?

To what extent, moreover, did the presence of any number of situational variables determine Canada's nuclear choice? Several situational variables exist which may influence a state's decision to go nuclear, such as international crises, the weakening of security guarantees, vertical proliferation, and domestic crises and leadership changes. These variables are generally understood to be incentives to acquire nuclear weapons. In a situation of crisis, a state may experience a sense of increased apprehension and insecurity, which often overrides whatever political disincentives exist, and may act as a serious inducement to go nuclear. Canada, for example, had found itself embroiled in an international crisis of significant proportions when, as a member of NORAD (North American Air Defence Command), it was required to participate in the blockade of Cuba during the missile crisis of 1962, and to place the Canadian military on nuclear alert. Yet, as history recounts, the crisis was not sufficient to "alter the balance in the domestic debate over the desirability of possessing nuclear weapons", nor did it, "provide the opportunity for forging a new bureaucratic consensus in support of a decision to go nuclear."[109] Why did Canada not react, as have some Third World countries, to the failure of the great nuclear powers to abide by Article VI of the NPT (see Appendix A) which demands the implementation of effective measures to control vertical proliferation, by advocating an

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price" Canada would pay by voluntarily excluding itself from the Indian market. This single indian trangression, curiously, drew a serious over-reaction from Canadian policy-makers who then chose to "punish all of its nuclear customers", in part to avoid future incidents of the sort and in part by way of example, including traditionally docile nation-states like Sweden, Finland, and Switzerland. All nuclear trading contracts were renegotiated at Canada's unyielding insistence to include more stringent nuclear safeguards or else "be cut off from Canadian uranium supplies" -- W. MacOwan, "The Nuclear Industry and the NPT: A Canadian View", in David B. Dewitt, (Ed.), Nuclear Non-Proliferation and Global Security. London: Croom Helm. 1987, p. 145.

[109] Potter, *supra* note 75, p.144.

independent nuclear force?[110] Has the credibility of the U.S. nuclear umbrella ever been in doubt among Canadian leadership? And, finally, to what extent has leadership change altered Canadian nuclear policy?

States will be dissuaded from engaging their nuclear option for equally numerous reasons. Among the most common disincentives are the possible hostile response by adversaries and allies of the potential proliferator, a greater security dilemma, strategic credibility gaps, the absence of perceived security threats, international regimes, cost, public opinion, and domestic bureaucratic bulwarks. However, a cursory preliminary examination of the case of Canada shows that the U.S. in fact encouraged Canada to accept nuclear weapons, for whom the technology was readily available (and therefore no strategic credibility gap) and for whom the cost of development was not prohibitive. Canada's participation in NATO (North Atlantic Treaty Organization), NORAD, and numerous other bilateral and multilateral military arrangements suggests that the Soviet Union was perceived as a critical security threat, and the dissuasive influence of the non-proliferation regime came into effect much later in the Cold War. Could unfavourable public opinion and an uncooperative bureaucracy have manipulated Canadian decision-makers so categorically?

Nuclear weapons, like other components of international politics, could have been used as instruments and symbols of Canadian power with a view to promoting Canada's interests.[111] Arguably, Canada's interests include protecting its national sovereignty both vis-a-vis the Soviet Union (a threat to territorial integrity, physical security, and democratic values) and the United States (a threat to political, cultural, and economic independence), enhancing its diplomatic influence, supporting its

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[110] *Ibid.*

[111] Greenwood, *supra* note 98, p. 25.

greatest allies, and bolstering its position within the international community, among others.[112] Our questions become whether or not Canadian leadership has ever contemplated maximizing Canada's interests by going nuclear? Why were nuclear weapons seen, rather, as detracting from Canada's interests? What countervailing disincentives weighed against acquisition? And, certainly, to what extent are the answers to these questions anticipated by our preferred theoretical approach?

B. The Nuclear Weapons Debate in Canada: Policy Decisions, Determinants, and Theoretical Underpinnings.

Canada's geopolitical situation is such that "two inseparable strategic imperatives" are derived therefrom: the defense of Canada, and the defense of the North American continent in cooperation with the United States.[113] The means by which Canada may attempt to achieve these strategic imperatives are numerous and depend on equally numerous factors, the least of which has proven to be military considerations (in the strictest sense) such as logistics, tactics, strategy, etc.[114] That Canadians "consider themselves an unmilitary people"[115] and "tend to endorse a Samaritan self-image in world affairs,"[116] has given substance to Canada's policy preferences, and required Canada to maintain many different (and often contradictory) military capabilities and policy orientations simultaneously. As discussed above, Canada has consistently pursued defense and industrial policies intimately related to nuclear weapons (as a product of its realpolitik interpretation of international

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[112] *Ibid.*

[113] Bland and Young, *supra* note 32, p. 115.

[114] *Ibid.*, p. 116.

[115] Cuthbertson, *supra* note 100.

[116] Bland and Young, *supra* note 32, p. 116.

relations), while at the same time rejecting nuclear weapons for itself and undertaking large international peacekeeping efforts under the auspices of the United Nations Organization. Both Canadian roles are keenly adhered to but appear based on divergent concepts that require divergent policies. This significant "centrifugal force", or "capabilities/commitments gap",[117] is a product, in large part of geography, and, of the superpower status of the United States. Canadian policy-makers have all had to contend with American hegemony and its security requirements which have inevitably bound Canada (unique in this sense among small and middle powers) to a sort of "schizophrenic" policy-formulation technique in order to achieve a cohesive form of Canadian "internationalism", while maintaining its alliance commitment to the United States. Sutherland had formulated the issue in the following way:

> [W]hat are the real alternatives? It seems evident that in the future as at present Canada will remain an American ally. This is the result of our geography; but in an even more compelling sense it is dictated by our interests. The question is whether we will be a powerful and effective ally or a weak and reluctant one. There is a parallel choice: whether our role in world affairs will be one of dependence upon the United States or whether we will be effective members of a larger community. This is a genuine choice and one, indeed, which we cannot avoid.[118]

The shadow of the Canada-U.S. relationship was one of the determining conditions that led to Confederation in 1867; ever since Canada has been pulled and pushed between closer attraction to the U.S. and a desire to assert greater distinctiveness and independence.[119] As a result of the obvious

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[117] *Ibid.*

[118] R.J. Sutherland, "Canada's Long Term Strategic Situation", International Journal (Summer, 1962).

[119] David Leyton-Brown, "Canada-U.S. Relations and the Quandary of Interdependence", Strathrobyn Papers [unpublished]. *Available online at www.envirolink.org.*

assymetry in the relationship, the "U.S. impact on Canada is normally greater than the reverse, as is the constraint upon Canadian rather than U.S. policy action".[120] Thus, while the U.S. is Canada's most important ally on whom Canadian security depends, it is also the greatest non-military threat to Canadian distinctiveness and independence (to Canadian economic autonomy, cultural identity, and environmental concerns). This geopolitical reality is at the source of Canada's renunciation of an indigenous nuclear weapons program. It is only when one surveys the historical record of Canada's nuclear policy that we may appreciate the linkages between Canada's relationship with the United States and its rejection of the nuclear option, as well as the continued relevance of realist theory as an appropriate theoretical underpinning, that is, that saying "no" to nuclear weapons and Canada's pursuit of "internationalist" policies, are both, arguably, manifestations of realist theory. This study disputes, therefore, the attractive tenet often observed in the literature on the topic, that Canada's traditional discomfort with being identified with the interests of the United States stems from Canada's inherently self-sacrificial mindset concerned solely with brokering global peace efforts; that Canada's fundamental belief in collective security schemes is demonstrative of its disinterest in increasing its power capabilities. It is, as will be shown below, as a self-interested rational actor, adept in the art of middle power "meddling" that Canada rejects nuclear weapons and cooperates internationally in the creation and maintenance of international regimes and institutions. Being a realist does not imply being immoral, only that morality finds little place in policy decisions where a nation-state is to choose between greater power and prestige in an anarchic international system, or

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[120] *Ibid.* The obvious assymetry is reflected in that the U.S. population is ten times that of Canada; U.S. Gross National Product is ten times that of Canada; the U.S. military is 100 times the size of Canada's; the U.S. is a political and military superpower; Canada sells 80% of its exports to the U.S. while the U.S. sells 22% of its exports to Canada; 70% of Canadian imports are from the U.S. while only 19% of U.S. imports are from Canada; over 75% of Canadians live within 100 miles of the U.S. border.

marginalization. Modified structural realism understands that cooperation among nations is often both necessary and possible for optimal gains.

(i) Mackenzie King Through Louis Saint-Laurent : Uneasy Continental Solidarity

Although Canada emerged from the Second World War as "a minor great power, the fourth most powerful military state in the world, with its economic strength greatly expanded," and with a latent capability to produce nuclear weapons, its strategic environment had changed both radically and to its disadvantage.[121] The post-war world had become the era of the long range B-29 bomber -- the airpower that had annihilated, in two short runs, the cities of Hiroshima and Nagasaki, to end the war with the Japanese Empire. The race for military supremacy had now moved from the land and seas into the skies, which made unquestionably clear that Canada had become a vital element in American defense calculations.[122] This became particularly obvious as the Soviet Union quickly shifted from its role as an ally during the war, to, essentially, an enemy in an increasingly tense Cold War.[123] Canada's geographical position made it a crucial variable in the Cold War equation, to which the United States reacted immediately. U.S. President Harry S. Truman had consulted with Canadian

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[121] Cuthbertson, *supra* note 100, p. 21.

[122] The United States had been dragged out of its historic isolationism of the 1920s and 30s and into the war by the ill-conceived Japanese attack on Pearl Harbour, Hawaii, in December of 1941, which assured the transformation of the U.S. into a great world power with global interests.

[123] The Western Block feared Soviet expansionism and in response to the advances made under Stalin's rule (Cominform, October 1947; Coup d'etat in Czechoslovakia, February 1948; Berlin blockade, April 1948 - September 1949) formed the North Atlantic Treaty Organization (NATO). U.S. countermeasures were equally set up under the Truman Doctrine to provide aid to Greece and Turkey in an effort to thwart the Communist uprising in the former, and Soviet pressures on the latter. Intensifying Soviet purges and repression in Eastern Europe led to other anti-communist pacts including the Organization of American States (O.A.S.) and the Southeast Asia Treaty Organization (S.A.T.O.).

Prime Minister Mackenzie King, through the Permanent Joint Board on Defense (P.J.B.D.)[124] suggesting America's desire to enter into long-term bilateral military arrangements with Canada for the protection of Canada, Alaska, and the northern United States (in Soviet bomber range) from potential Soviet aggression. Canada agreed, appreciating how advanced military technology had cancelled out the immunity from attack hitherto enjoyed by virtue of geography, and participated in organizing the 1946 Canada-U.S. Military Cooperation Committee.[125] Canada's concerns, however, were twofold: on the one hand Canadian decision-makers realized Canada's dependence on the U.S. for its defense in the context of a volatile Cold War; on the other hand, this fact left Canadian leadership overwrought with ambivalence and discontent for they were expressly uneasy and unwilling to subordinate the country to its southern neighbour. The U.S., moreover, was in a great hurry to set up an effective and elaborate air defense system deployed as far north as possible -- the priority of the Basic Security Plan of 1946. However, even the strategically-sound requirement for an integrated Canada-U.S. Air Defense Command "conflicted with political reluctance to have too close an association with the U.S.".[126] Nonetheless,

> ...[T]he disparity in resources, the strategic significance of Canadian geography, the intesifying Cold War, and advances in

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[124] The PJBD was sanctioned by the Ogdensburg Declaration of 1940 -- a U.S. initiative for military cooperation between Canada and the United States for the joint defense of North America. The plan had never been formally approved by either government and only reluctantly accepted by Canada whose main impetus was to meet the feared emergency of a NAZI victory over the United Kindgom (which faced German invasion in 1940 following the fall of France). See especially C.P. Stacey, Arms, Men and Governments: The War Policies of Canada, 1939-1945. Ottawa: Queen's Printer, 1970, pp. 339-343; and House of Commons Debates, 12 November 1940, pp. 56-57.

[125] Cuthbertson, *supra* note 100, p. 23. Cuthbertson goes on to explain that by 1950 it had been concluded that the Soviet Union was capable of a full-scale attack on North America via the Polar ice cap.

[126] Tom Keating, Canada and World Order: The Multilateralist Tradition in Canadian Foreign Policy. Toronto: McClelland and Stewart, 1993, p. 47.

> military technology were to generate even greater (U.S.) pressures for closer bilateral defense cooperation.[127]

The bilateral formulation of the Basic Security Plan was seriously questioned by Canada, and while the United States refused to deviate from the Plan's bilateral character, the British, upon King's unyielding insistence, would be kept informed of all happenings. The arrangement was ultimately accepted and publicly rationalized as a limited bilateral contribution to post-war world stability. King and his cabinet, however, had accepted the Plan for reasons other than those publicly stated; the entire concept was a security necessity, regardless of cost and logistics difficulties, in order to defend Canada's national interests against Soviet attack. Thus, explained National Defense Minister Brooke Claxton, "by the time any attackers had travelled the hundreds of miles...(towards) the nearest desirable target they would be completely lost to our defending control system".[128] The arrangements which were of greatest concern for both Canada and the United States were those which dealt with continental air defense, since it was feared that a Soviet (nuclear) attack would come across the Polar ice cap into North America. The first priority, therefore, was for "an effective air defense system, including early-warning, meteorological and communications facilities,...air bases, fighter-interceptor aircraft, and anti-aircraft defenses."[129] In accordance, both countries (with continued Canadian reluctance) cooperated to establish:

> 1. the Northwest Highway System (Alaska Highway) for which Canada was responsible;

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[127] *Ibid.*, pp. 27-28.

[128] *House of Commons Debates.* 26 November 1953, p. 362. Also cited in Cuthbertson, *supra* note 100, p. 26.

[129] Cuthbertson, *supra* note 100, p. 23.

> 2. the Northwest Staging Route (airfields) from Edmonton, Alberta, northward, adminstered by the RCAF (Royal Canadian Air Force);
>
> 3. Static LORAN (Long-Range Aids to Navigation) stations in the Arctic under the direction of the U.S. Coast Guard;
>
> 4. Five weather stations, with ALERT (the station furthest north) operating as an electronic listening post;
>
> 5. Seventy-five radar stations in the U.S. and Alaska;
>
> 6. Thirty-three radar stations in Canada -- called the Pinetree Line -- which would become operational in the mid 1950s under Prime Minister Louis St-Laurent.[130]

It is clear, therefore, that Canada appreciated the Soviet threat, perhaps in a less alarmist manner than its U.S. counterpart, but enough so to overcome its deep reluctance to engage in too close a relationship with the U.S. and accept the Basic Security Plan. But as Bland and Young explain, it would remain "an axiom of post-war Canadian security policy that multilateralism is a much preferred option when compared with an exclusively bilateral relationship with the United States",[131] the logic being that

> [e]ven in dyadic partnerships cemented by shared liberal democratic values, it can be taken as a given that a disproportionately weaker sovereign unit will seek to enlarge its margin of maneuver by exploiting the inevitable openings in the woof and warp of a contextual multilateralism.[132]

Canada could not defend itself against the perceived magnitude of the Soviet threat in any unilateral

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[130] *Ibid.*, pp. 21-43. Also see Robert A. Spencer, Canada in World Affairs from U.N. to NATO, 1946-1949. Toronto: Oxford University Press, 1959.

[131] Bland and Young, *supra* note 32, p. 113.

[132] *Ibid.*

fashion, unless, presumably, it had developed an indigenous nuclear weapons arsenal. And when international institutions such as the United Nations were seen as incapable of fulfilling the security requirements of Canada's immediate post-war situation, Mackenzie King's government succumbed to the next best alternative, i.e. a limited bilateral military relationship with the United States with a more circumscribed form of multilateralism to attend to Canada's fear of subjugation to the U.S. and consistent with the promotion and maintenance of meddling power status. As realist theory dictates, Canada would not compromise its security by folding to its uneasiness with a close alliance to the U.S.. Canada-U.S. defense cooperation was thus a necessity that proves entirely consistent with traditional realist theory. A deeper unit-level analysis, however, is required to understand why Canada would choose to renounce its nuclear option within the framework of its bilateral relationship with the U.S. if doing so would have, arguably, provided for greater independence from the United States and ensured Canadian security with a credible deterrent capability. Except for the threat of a Soviet nuclear strike, Canada faced no foreign military threats and enjoyed relative immunity from conquest as no potential enemy could project and support sufficient combat power for such long distances. A Canadian nuclear arsenal, therefore, would have served, theoretically, only two clear purposes as discussed above: to deter the Soviet Union from a nuclear attack, and to increase Canadian prestige and independence from the United States. With respect to the former purpose, U.S. President Franklin D. Roosevelt's 1938 declaration on U.S. attitudes towards Canada underlines the primary incentive which influenced Canadian nuclear restraint: extended deterrence. Speaking about Canada-U.S. military cooperation, Roosevelt pledged that the United States "(would) not stand idly by if

domination of Canadian soil is threatened by any other empire."[133] Prime Minister King returned the pledge by promising that Canada would labour to ensure that "should the occasion ever arise, enemy forces should not be able to pursue their way either by land, sea or air to the United States across Canadian territory."[134] Johnson explains that

> [T]he fact that the U.S. would see any threat to Canada as a threat to itself means only that any potential attacker would have to consider the consequences of an attack on the U.S. if it planned to attack Canada.[135]

Certainly, with the advent of the Soviet ICBM (Inter-Continental Ballistic Missile), and the diminished threat of the long-range bomber, the strategic significance of Canada to the U.S. was lessened. However, it is a precept of strategic studies that the deterrent power of a nuclear force depends in large part on the ability to survive a first-strike and to successfully launch a second-strike counter-attack meant to devastate the attacker. The U.S. government, then, to maintain its deterrent credibility as a second-strike nuclear force was required in turn to maintain a substantial level of cooperation with Canada:

> As long as Canada helped to protect its strategic forces, the U.S. was free to threaten to use its nuclear weapons wherever it chose and for whatever purposes...[136]

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[133] 18 August, 1938, Kingston, Ontario. Roosevelt here was merely repeating a promise made 14 August, 1936 which had passed largely unnoticed. Leonard V. Johnson, "Military Cooperation with the U.S. and Canadian Independence", International Perspectives (Sept/Oct 1986), p. 3, and Brian Crane, An Introduction to Canadian Defence Policy. Toronto: Canadian Institute of International Affairs, 1964, at 3.

[134] *Ibid.* 21 August, 1938, Woodbridge, Ontario. Repeated in the House of Commons on 30 March, 1939.

[135] *Ibid.* Johnson goes on to explain that with the emergence of the Soviet bomber force in the 1950s, the U.S. had become vulnerable to Soviet attack and dependent, therefore, on Canadian territory for early warning, essential to the survivability and use of U.S. strategic nuclear forces.

[136] *Ibid.*, p. 4.

King's government had participated, alongside Britain, in the development of the two American atomic bombs (the Manhattan Project), with plutonium enriched from Canadian uranium, abundant sources of cheap hydroelectric power, quality scientists and technicians, the world's only nuclear power processing plant, and open areas to serve as weapons test sites.[137] No other country had been in as favourable a position to develop nuclear weapons.[138] However, notwithstanding the vital Canadian contribution to the Manhattan Project, the Canadian government appears almost immediately to have renounced its nuclear option -- "a conscious decision made after an extensive discussion of the issue at the Cabinet meeting of 17 November 1945".[139] Numerous factors are held accountable for this decision by the relatively few scholars that have studied the case of Canada. Among the numerous factors suggested, a consensus appears to have been reached, to which this author adheres, as to the undeniable salience of the extended deterrence variable. Potter argues that one of the factors primarily responsible for this Canadian policy of nuclear restraint was "confidence in the American security guarantee and nuclear umbrella."[140] Steiner concurrs with Potter's assessment,[141] while pointing out, however, that while the American nuclear umbrella may have been more "leaky" than imagined by Canadian leadership, the credibility of the American commitment to

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[137] See Mueller, *supra* note 101, p. 865.

[138] See Beaton and Maddox, The Spread of Nuclear Weapons. London: Chatto & Windus, 1962, pp. 99-100, also cited in Mueller, *ibid.*

[139] Arthur Steiner, "Canada: The Decision to Forego the Bomb", Monograph no. 8, Report Prepared for the Energy Research and Development Agency, Los Angeles: Pan Heuristics, 1977, p. 4, also cited in Potter, *supra* note 75, p. 174.

[140] Potter, *ibid.* Potter goes on to qualify extended deterrence as "the single most important disincentive to a Canadian nuclear weapons program."

[141] Steiner, *supra* note 139.

the defense of Canada was high (see Table 3), contrary to the perception of France and Great Britain whose behaviour seems to contradict, *prima facie*, the realist theory of hegemonic stability that underlies the notion of extended deterrence. Why, the argument proceeds, would France and Great Britain choose to develop their own nuclear arsenals if their greatest ally, the United States, provided a nuclear umbrella? French President General Charles De Gaulle argued that "nuclear weapons could be credibly used by a nation-state in the direct defense of its own territory, thereby denying the plausibility of one nuclear power extending deterrence over another."[142] Would the United States have placed itself at risk or engaged in nuclear war with the U.S.S.R. to defend or couter an attack on Paris? The British were equally sceptical of the vailidity of an American nuclear umbrella and chose

Table 3: **Percentage of the American Public that favoured U.S. military intervention to defend a foreign state or region in 1974.**

	Western Europe	West Berlin	Israel	Canada
%	39	34	27	77

Source: **A. Steiner, *supra* note 139, p. 11.**

to embark on their own weapons program. Certainly, in both cases, prestige and nationalism and their experience of the Second World War, coupled with their scepticism to act as an irresistible incentive for acquisition. But the motivating conditions existing in Paris and London were absent in Ottawa. As will be discussed below, prestige played a far different role in Canada, acting as a *disincentive* to acquisition. Further, although France and Britain have been traditional allies of the U.S., their military (and economic) relationship with the latter differs substantially from Canada's. The Canada-U.S. military relationship has been uniquely intimate and its overt and manifest nature is well illustrated by Canada's belief in a credible U.S. nuclear umbrella. Mueller appropriately concludes that "Canada

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[142] F. O. Hampson, H. Von Riekhoff, and J. Roper (Eds.) The Allies and Arms Control. Baltimore: Johns Hopkins University Press, 1992, p. 24.

(had) *no reason* to feel that the credibility of the U.S. nuclear umbrella over Canada (had) declined."[143] The British and French perceptions of the validity of extended deterrence was not mirrored in Canadian attitudes.[144]

The "alliance partner designation", according to Meyer, "denotes a nation whose participation within a defense coalition implies an adversary relationship with the target(s) of that alliance."[145] In other words, Canada's intimate relationship with the United States translated into an implicitly adversarial relationship with the Soviet Union. This fact appears to falsify the hypothesis forwarded by Mueller that one of Canada's incentives for restraint was that "nuclear arms would make the country a prime target."[146] It is highly unlikely that, in the event of a nuclear confrontation between the superpowers, the Soviets would have spared Canadian air bases and radar installations knowing that these were at the disposition of United States, and in some cases under exclusive U.S. control. Canada, therefore, was already a prime target of Soviet ICBMs (see Appendix B), regardless of its nuclear renunciation. The Canadian military establishment emphasized the value of extended deterrence as well:

> The construction of our own nuclear weapons system, costly and difficult as it would be, is not beyond our financial and technological capacity...But, altogether fortunately, our occupancy of the northern half of the North American continent makes such expense and effort wholly unnecessary. Any atomic attack upon North America would bring about United States

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[143] Mueller, *supra* note 101, p. 876 (emphasis added).

[144] Interview conducted with official at Statistics Canada reveals that while 77% of Americans supported a military intervention to defend Canada in the event of war, over 80% of Canadians either agreed or strongly agreed that the U.S. would intervene on Canada's behalf.

[145] Meyer, *supra* note 56, p. 58.

[146] Mueller, *supra* note 101, p. 875.

> retaliation. The Soviet Union, therefore, cannot under imaginable circumstances contemplate a nuclear strike directed specifically against Canada. The American apparatus for massive retaliation seems to deter attack on Canada precisely to the same extent that it serves to deter attack on the U.S. itself. We are the sole ally of the U.S. of which this can be said.[147]

Epstein admits that while Canada may have felt that it did not truly face a serious military threat from any enemies, if any such threat were to emerge, "the United States would..., in its own interest, have to protect and defend Canada against any foreign military threat, conventional or nuclear."[148] Murray suggests that Canada has always, by virtue of what is sometimes termed its "strategic culture", allied itself with a protector; prior to World War II Great Britain was the protector, but since that time, "the United States has replaced Great Britain" as Canada's protector.[149] Thompson argues that "Canada's location is so strategically important to the United States that the Soviet Union could not attack Canada without the United States responding."[150] Wentz admits that it would be "difficult to imagine a nuclear attack against Canada that would not bring an immediate response from the United States."[151] And, finally, Quester concludes that "Canada's willingness to foreswear nuclear weapons must be attributed largely to its political and geographic closeness to the U.S."[152] The Canadian

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[147] James Eayrs, "Canada, NATO, and Nuclear Weapons", RCAF Staff College (1960), cited in Potter, *supra* note 75, p. 175.

[148] William Epstein, "Canada", in Goldblat, *supra* note 3, p. 175.

[149] Douglas J. Murray, "The United States-Canadian Defense Relationship in Transition: An American Perspective", Altantic Community Quarterly Vol. 25 (1987-88), p. 78.

[150] Wayne C. Thompson, "Canadian Defense Policy", Current History (March 1988), p. 106.

[151] Wentz, *supra* note 2, p. 43.

[152] George Quester, The Politics of Nuclear Proliferation. Baltimore: Johns Hopkins University Press, 1973, p. 154.

decision to forego the bomb was thus heavily influenced by a credible U.S. nuclear umbrella.

Throughout his term in office (1935-1948), Mackenzie King would grow increasingly ill-at-ease with Canada's relationship with the United States, believing that the "long-range plans of the Americans was to absorb Canada", and openly asserted that he preferred to "have Canada kept within the orbit of the British Commonwealth."[153] But King's preference to remain connected to Britain would have to take second place behind what was viewed as a greater Communist emergency, which would inevitably keep Canada "snugly in the orbit of the United States."[154] Had circumstances been different, King would have undoubtedly laboured to distance Canada from the U.S. and restore the independence that had been lost to the United States as a result of the World War II alliance formed to defeat NAZI Germany, but the implications of the Cold War would not permit such a policy. King's government was forced to maintain this uneasy solidarity with the U.S. because,

> [i]n the postwar climate of fear of Soviet treachery, there were few politicians who were willing to identify American influence as colonialism.[155]

In fact, the Government had been claiming in Parliament that the United States (under Truman's leadership) had reason to believe that the Soviet Union was masterminding a North American invasion, destined to take place prior to the year 1950.[156] Under such circumstances, structural realist

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[153] See especially J.L. Finlay & D.N. Sprague, The Structure of Canadian History (3rd Ed). Scarborough: Prentice-Hall Canada Inc., 1989, p. 371.

[154] *Ibid.* Finlay and Sprague describe the Igor Gouzenko incident of 1945, in which the aforementioned office clerk at the Russian embassy in Ottawa leaked news to Canadian authorities that an elaborate Russian spy network including Canadian collaborators had been developed to obtain secrets of North Amercian technology, as an impetus for closer relations with the U.S. and increasingly strained relations with the U.S.S.R..

[155] *Ibid.*, p. 372.

[156] Refer to *House of Commons Debates*, February 1947.

theory, as described above, would anticipate a Canadian policy to continue close bilateral ties with the U.S., in the name of security, and as a function of Canadian capabilities. To assert Canada's independence by moving against Truman's policies, or adopting a position of non-alignment as had been suggested by a small minority of Parliamentarians led by CCF member Stanley Knowles at the time, would have been to surrender Canada's defense to the dreaded notion of U.S. dominance. Finlay and Sprague argue that Canada had "traded independence for security", and thus "fell dutifully into line as a satellite in the American solar system."[157] The same would prove true throughout Louis St-Laurent's term (1948-1957) as Prime Minister as well.

The American sponsored Summer Study Group of 1952 reported that the Soviet Union was coming dangerously close to achieving a first-strike capability and that North American defenses were wholly inadequate. This classic North American fear, characteristic of the Cold War, that the Soviet Union had achieved, or was on the brink of, nuclear superiority had been consistently (and correctly) disputed by the U.S. Central Intelligence Agency (C.I.A.). Nonetheless, policymakers in both the U.S. and Canada, prompted on the one hand by the military industrial complex, and on the other hand by paranoia in the face of an enimagtic Soviet Union, had chosen to ignore the conclusions of their intelligence operatives and adopt a worst-case scenario attitude. The Study Group equally reported that the development of an early warning defense system spanning the northern continent was an absolute necessity if North America was to update its defenses to face this increasing Soviet threat. The 1953 explosion of the Soviet (the world's first) hydrogen bomb demonstrated the undeniable urgency of such a system. Canada's displeasure with its apparently irreversible and permanent ties to the U.S. would be alleviated somewhat with the 1949 establishment of the North Atlantic Treaty

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[157] Finlay and Sprague, *supra* note 153, p. 374.

Organization (NATO). NATO was embraced with open-arms by Canadian leaders as the organization was viewed as a small-scale United Nations (a pretense rejected by the Americans whose sole concern was military effectiveness) -- a long-sought multinational form of military cooperation to dilute Canada's subordination to the U.S..[158] Of course, the United States was by all accounts the dominant member of the NATO alliance, and participating countries

> [w]ere badgered to perform duties as determined by the Americans. Given the buffer of the Atlantic and the less complete dependence of Europe on the United States economically, the Europeans were in a position to resist or withdraw from such pushiness more successfully than could Canada.[159]

Nonetheless, St-Laurent's government found a source of psychological solace in NATO and continued to associate Canada's defense as much with NATO as with the U.S.. In fact, St-Laurent's government hoped to move a greater part of Canada's defense under NATO auspices, but practicality, strategy, logistics, and American disagreement interfered with the suggestion.[160]

The conclusions of the Summer Study Group of 1952 meant that the defense of the United States (and Canada) had become dependent on the ability to launch a Massive Retaliation (MR) against a Soviet nuclear attack, which in turn was dependent upon the ability to anticipate a Soviet attack, the Report urged, at least three to six hours in advance. The Report equally concluded that the defense of Western Europe depended on the same conditions of preparedness, and emphasized

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[158] *Ibid.*, p. 373.

[159] *Ibid.*

[160] Consider General C. Foulkes, "The Complications of Continental Defense", in L.T. Merchant (Ed.). Neighbours Taken for Granted. Toronto: Burns and MacEachern, 1966.

the renewed significance of Canada's airspace and northernmost territories.[161] Sutherland has argued that these concerns were enough to strengthen Canada-U.S. defense cooperation, calling it "an investment in security", the beneficiaries of which included Canada.[162] Following a gruelling series of negotiations between the government of Louis St-Laurent and the Eisenhower administration, the plan to develop the Distant Early Warning (DEW) Line was announced in Parliament in 1954 (see Appendix C).[163] Moreover, the St-Laurent government had already engaged itself in 1953 in the construction of the McGill Fence (or Mid-Canada Line), a set of ninety-eight unmanned radar installations which "provided a thin vertical electronic fence capable of detecting aircraft passing through its coverage from ground level up to a great height."[164]

Thus, under Mackenzie King and Louis St-Laurent, Canada would develop intimate defense links with the U.S.; links directly related to the threat of nuclear attack. Curiously, at no time since the fateful Cabinet meeting of November 1945, was the possibility of developing an indigenous nuclear weapons program ever truly pondered. Extensive research of House of Commons Debates, Department of Defense Papers, various other government archives, and even the memoirs of retired military personnel of higher rank reveal no attempts to raise the issue of a Canadian nuclear weapons arsenal. Potter agrees that

> There is no public evidence...that Canada...seriously contemplated building an atomic bomb or pursuing a policy of

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[161] See R.J. Sutherland, "The Strategic Significance of the Canadian Arctic," in R. St.J Macdonald (Ed.), The Arctic Frontier. Toronto: University of Toronto Press, 1966.

[162] *Ibid.*, pp. 266-267, cited in Cuthbertson, *supra*, note 100, pp. 39-40.

[163] Cuthbertson, *supra* note 100, p. 40.

[164] *Ibid.*, p. 42.

> nuclear ambiguity.[165]

The development of a Canadian nuclear weapons program has, based on the lack of evidence to the contrary, never been considered since that first and apparently final debate in 1945. The issue has never been one of popular or Parliamentary discourse. The decision was tacitly made and accepted, and

> [t]here has rarely been such evidence of the docility of the Canadian public as during that period on atomic questions...This was a subject on which the public seemed to accept government leadership with little questioning.[166]

This author disputes the oft-asserted suggestion that a Canadian tradition of docility may have acted, in part, as a psychological disincentive to acquire nuclear weapons. The suggestion is that while Canadian policy-makers have traditionally espoused a realpolitik view of international relations, they have equally rejected nuclear weapons based in part on moral and psychological grounds. Mueller has argued that the Canadian self-image "as an influential, but not militarily powerful, actor on the world scene has great appeal and is widely accepted," and that the Canadian populace, "after careful objective analysis, find their country to be morally superior to their gigantic neighbour."[167] The immorality of weapons of mass destruction may have been a minor consideration for Canadian policy makers, but there is serious doubt as to the extent of the role of morality where Canadian national security is involved.[168]

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[165] Potter, *supra* note 75, p. 174.

[166] Epstein, *supra* note 4, p. 176.

[167] Mueller, *supra* note 101, p. 878.

[168] Interview with official at External Affairs and International Trade Canada. While the Canadian rank and file may share the opinion that nuclear weapons are inherently immoral, beyond the impact of

The argument that Canadian leadership was dissuaded from acquisition as a result of Canada's traditionally peaceful nature has been countered by the argument well made that Canada has participated in nearly all major wars this century. However, a distinction must be made between Canada's peaceful tradition and its military history. Canadian involvement in war has never been the result of unilateral Canadian action. Canada has participated only in conflicts characterized by military cooperation among nations and international consensus -- "first in the informal arrangements of the British Empire and Commonwealth, then as one of the Allied nations during the Second World War, and today in the North Atlantic Treaty Organization."[169] There may, admittedly, have been a form of "national pride" involved in Canada's rejection of nuclear weapons, and an appreciation that such rejection was demonstrative of, rather than its relatively peaceful nature, its strive to achieve a position of power in the world order by virtue of its role as an international peace broker (discussed in greater detail below).

Rather than consider developing nuclear weapons, Canadian policy was geared toward limiting its contribution to North American defense, first within the framework of the Canada-U.S. bilateral military relationship then within NATO, to early warning systems, joint training exercises, and production sharing, while expressly relying on an entirely credible nuclear umbrella. Consequently, as Potter accurately concludes, "there are few Gallois-type scenarios which would argue convincingly for an indigenous Canadian nuclear deterrent."[170] Canadian nuclear weapons were

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public opinion on the decion-making process of Canada's leadership, there is no evidence that any such psychological disincentive played a significant role in Canada's nuclear renunciation.

[169] *Ibid.*

[170] Potter, *supra* note 75, p. 175.

neither desired nor deemed useful. The defense of Canada, in reality, then, rested with the United States and its ability to destroy the Soviet Union in a second-strike counter-attack -- it is the U.S. nuclear deterrent that defends Canada. Even if King and St-Laurent had hoped to find a role for Canada as a neutral country, returning to its semi-isolationism of the pre-war years, historical ties, common democratic values, economics, cultural affinity, and the perception of the Soviet threat as wholly credible, inevitably confronted their leadership and forced an alliance with the United States (and to an extent Western Europe). Any war between the superpowers would have undoubtedly involved Canada, whether neutral or allied.[171] There was thus no real way of isolating Canada from American actions. The potential destruction of a nuclear war was vividly illustrated with the bombing of Hiroshima, and there was clearly very little that a small power like Canada could accomplish in terms of national security in the face of a Cold War wherein the "natural reaction of each side...was to seek to improve its own security by developing more powerful weapons with which to threaten the other side."[172] Canada's security would be no greater with a Canadian stockpile of atomic bombs. The Soviet threat was best resisted via the American nuclear umbrella and Canadian participation in multinational and bilateral western defense alliances such as NATO and NORAD. One can understand Canada's post-war behaviour as a strategy developed in view of Canada's position within the international system. The link between the Cold War world and Canada's behaviour is forged by structural realism's rationality assumption, which enables us to predict that King and St-Laurent

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[171] Joseph Levitt, Pearson and Canada's Role in Nuclear Disarmament and Arms Control Negotiations, 1945-1957. Kingston: McGill-Queen's University Press, 1993, p. 46. Also see D.W. Middlemiss & J.J. Sokolsky, Canadian Defence: Decisions and Determinants. Toronto: Harcourt Brace Jovanovich, 1989, p. 17.

[172] *Ibid.*, Levitt, p.9. By 1957, the U.S. had already stockpiled over 10,000 atomic bombs, and was injecting huge amounts of resources into weapons and delivery systems research.

would respond to the hegemonic stability imposed by their geo-political reality as they did. Canada acted collectively with the U.S., not out of "some blind sense of servitude or resignation to American policy",[173] but with a view to furthering Canadian interests.

(ii) **J.G. Diefenbaker: Government 'Nuked' by Indecision.**

Throughout the election campaign of 1958, Diefenbaker's political plank had touted a number of central intentions, among which were a reduction of the continentalism nurtured by his predecessors, and a restoration of closer ties to Britain and the Commonwealth. This position was supposed to suggest a remedy for the growing national identity crisis, and ironically followed the assertions of his predecessors who had often exclaimed that Canadians felt "pride in the British Empire" -- no leader, of course, would risk to suggest that Canadians should be proud to be almost American.[174] The difficulty was that Diefenbaker could not truly remedy Canada's identity malaise without, as he understood it, jeopardizing Canadian security. Diefenbaker's many successes (Canadian Bill of Rights and greater foreign trade, for example) were overshadowed by his broken promises, especially his failure to reorient Canada to Britain.

The Canadian commitment to continental air defense in cooperation with the United States would remain consistent, and take on added importance when the time came for Diefenbaker's new government to consider the proposed North American Air Defence Command (NORAD) agreement. Ratification came in 1958, not, however, without intense debate in Parliament and with the Americans

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[173] John Holmes, The Shaping of Peace Vol. 2, Canada and the Search for World Order, 1943-1957. Toronto: University of Toronto Press, 1982, p. 10, cited in Middlemiss and Sokolsky, *supra* note 171.

[174] Finlay and Sprague, *supra* note 153, p. 378.

(fuelled by the usual Canadian discomfort with bilateral agreements).[175] NORAD was the next logical step in the Canada-U.S. bilateral military relationship. The Command was headed by a United States Air Force general, seconded by a Canadian officer; the alliance would be responsible to both the Canadian and American governments. Essentially, the air forces of both countries were consolidated and placed under joint command within the depths of a mountain located in the State of Colorado. Diefenbaker had stated that the main strategic objectives of the NORAD alliance were

> 1. to provide an effective base for and effective protection of the strategic nuclear counteroffensive capability, and
>
> 2. to maintain effective early warning and air defense systems.[176]

Doubts were raised, however, with respect to the issue of joint command. The alliance, it was argued by critics, would prove heavily lopsided in favour of the Americans and Canadian decision-making power would be little more than nominal. More cynical critics argued that the Canadian contingent at NORAD headquarters would be without significance and offered to Canada as a symbolic gesture meant to satisfy the Canadian obsession with maintaining a semblance of independence in foreign policy decision-making. The literature on the extent of Canada's decision-making powers within NORAD remains inconclusive. It is highly improbable, however, that Canada played a role any greater than that of a "junior partner" that stubbornly insisted on reviewing decisions, and holding back its agreement until it had demonstrated to the Americans that it would not allow itself to be bullied. Canada's obstinance was regarded by American diplomats with a certain degree of "amused

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[175] Canada had hoped that NORAD would become an integrated part of the NATO alliance, but the Americans did not share this view.

[176] Cuthbertson, *supra* note 100, p. 49.

tolerance".[177] Canadian diplomats, on the other hand, did not wish their country to be a satellite of the United States, but they also attempted to limit their irritating conduct so as not to start unnecessary quarrels with the Americans.[178]

Diefenbaker would be confronted with more serious problems in defense as his term in office proceeded and there is no settled explanation for his behaviour in the course of events, though this author concurs with the most widely accepted explanation propounded by Newman that a flaw in Diefenbaker's character -- his indecisiveness -- was responsible for his difficulties.[179] Diefenbaker's "idle Parliament", as *The Globe and Mail* had dubbed it, won a plurality of votes in the 1962 election (116 seats, down from the record high 208 seat majority of the previous term).[180] Unfortunately, even the return to minority government, which made Diefenbaker vulnerable to Parliamentary defeat in a crisis of indecision, did not make him more decisive.[181] Moreover, Diefenbaker began his new term with an unresolved problem from his previous term: an appropriate defense policy. In step with the huge American build-up of nuclear arms at the same time, Canadian decision-makers were severely pressured by the U.S. to further their contribution to North American defense. For Diefenbaker, "the problem was deciding upon an affordable defense policy that was anti-communist without being subserviently pro-American".[182] Diefenbaker's staunch anti-communism helped in accepting the

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[177] Levitt, *supra* note 171, p. 57.

[178] *Ibid.*, p. 59.

[179] Peter Newman's thesis is discussed in Howard H. Lentner, "Foreign Policy Decision Making: The Case of Canada and Nuclear Weapons", World Politics (October 1976) Vol. 29, p. 32.

[180] Finlay and Sprague, *supra* note 153, p. 392.

[181] *Ibid.*

[182] *Ibid.*

NORAD agreement, while his sense of budget encouraged him to cancel a 1953 Liberal program which had contracted the A.V. Roe Company of Ontario to develop a supersonic fighter-bomber called the CF-105 'Arrow'. Even the Liberals themselves had, in 1957 (in the closing days of St-Laurent's government), realized that the CF-105 program was not cost-effective and expected accordingly to cancel it after the upcoming election. However, the Americans placed new pressures on Diefenbaker to provide alternative programs, arguing that Canada's defense contribution was wholly inadequate and that greater cost effectiveness (for which the Canadian government, third to last in NATO in terms of budget allowance for defense spending, and strapped for cash, was desperate) could be obtained with the arming of RCAF (Royal Canadian Air Force) fighters with nuclear warheads. The U.S. was essentially making an argument for the well-known incentive for nuclear acquisition which calls for "more bang for the buck", suggesting that once the cost of conventional military forces becomes intolerable, states may maximize their military capabilities by acquiring nuclear weapons while simultaneously reducing their financial burden. Steiner has argued that this economics incentive for acquisition has never been a viable one in the eyes of Canadian decision-makers, partly due to the fact that the Canadian governement both overestimated the cost of development of an indigenous weapons program and underestimated the difficulty of building them.[183] However, while these misperceptions may have dissuaded Diefenbaker's government from developing *Canadian* nuclear weapons, the U.S. had offered to arm Canadian fighters with *American* nuclear weapons.

> [D]iefenbaker...rebelled at the billion dollars it might cost to equip the RCAF with (Arrows). Despite its technical sophistication...the Arrow was scrapped and a partial substitute

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[183] Steiner, *supra* note 139, p. 21.

> was found for North American defense in the BOMARC interceptor (an unmanned [ground-to-air] missile manufactured by the Boeing Corporation of the United States).[184]

The decision to equip Canadian forces with the BOMARC missile encountered numerous difficulties of which three stand out:

> 1. it had such an unsatisfactory development history that there was strong pressure to cancel the program;
>
> 2. it had been developed in two versions: the "A" version could use either a conventional or a nuclear warhead, but performance limitations caused the U.S. to discard it; the "B" version could use only nuclear warheads and this fact began the now infamous debate over the adoption of nuclear weapons;
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> 3. difficulty concerned the strategic usefulness of BOMARC. Because of program delays it would not come into service until 1962, after the period of considered maximum danger from the Soviet bomber threat.[185]

Cancellation of the program, however, was ruled out because (it was publicly stated), on the one hand, Canada had already committed itself to the program, and, on the other hand, it was feared that to back out of the deal would damage not only Canada-U.S. relations, but Canada-Europe relations as well. The government clearly faced a dilemma: cancel the deal and damage the relationship with the U.S. and potentially with European allies as well as discredit itself for not honouring its

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[184] Finlay and Sprague, *supra* note 153, pp. 392-393.

[185] Cuthbertson, *supra* note 100, pp. 56-57. Note also that, in addition to the agreement to equip Canadian air squadrons with nuclear weapons, so-called "Honest John" nuclear rocket batteries were also accepted for use by the Canadian infantry brigade stationed in Europe. The proposal was originally tabled at the 1957 annual meeting of NATO Ministers in Paris. It was at that meeting that NATO had determined that stockpiling American nuclear weapons for NATO use in Europe (that is, increasing firepower) was the best substitute for increasing military manpower in Europe which, it was agreed, could not adequately match the huge Soviet deployment of troops. Canada seemed to accept this decision with little thought, not seeming to realize fully the central implication of the decision, namely, that Canada's European contingent would, essentially, either be armed with nuclear weapons or no weapons at all. See Blair Fraser, The Search for Identity: Canada, 1945-1967. Toronto: Doubleday Canada Ltd., 1967, p. 190.

commitments, or, pursue a poorly-conceived program of questionable utility which requires nuclear warheads and which has not been favoured by the Royal Canadian Air Force (RCAF). Political analysts, and no less so the Americans, could not comprehend Diefenbaker's unwillingness to accept the BOMARCS. His nationalism, many guessed, was compounded by the influence of external affairs Minister Howard Green who categorically opposed the acquisition of the BOMARCS for fear of lost Canadian sovereignty to the Americans. The confusion over defence in Ottawa intensified, reaching a peak when Diefenbaker finally agreed to deploy the BOMARC 'B' missiles in 1958, "to buy surface-to-surface missiles for the brigade group in Europe in 1957, to re-equip the air division with Starfighters in 1959, and to use VOODOOs with air-to-air missiles. All these weapons systems required the use of nuclear warheards".[186]

Certainly, there was never any intention by Diefenbaker to develop an indigenous weapons program, based on Canadian soil. He agreed, however, to place nuclear weapons in the hands of Canadian forces under the "two-key system" (common to NATO members) in which the United States retained ownership of the weapons made available to allied forces while joint control was maintained until the event of a nuclear conflict when the U.S. would release these weapons to its respective allies for actual use. Joint control was desired by the U.S. to limit horizontal proliferation of weapons, whereas allies accepted it as a viable alternative to indigenous weapons development. Curiously, yet not surprisingly, Diefenbaker interpreted the two-key system as a subordination of Canada to the U.S., and remained ambivalent and undecided about arming the BOMARC as a result. At the same time, External Affairs Minister Howard Green's commitment to disarmament and

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[186] *Ibid.*, p. 59. The VOODOO was the F-101 B fighter aircraft provided by the U.S. to Canada as part of the Canadian NORAD contingent following the cancellation of the Arrow project.

thoughts about non-alignment (shared by numerous other Cabinet members) meant that Diefenbaker's decision to accept the BOMARC B in the first place was frowned upon by members of his own government. The fact that it had never been made clear to Cabinet that these missiles were functional *only* as long as they were armed with nuclear warheads tempered their resistence to the decision initially. However, when it was subsequently discovered that Canada would become a *de facto* nuclear country by arming itself with the BOMARC, Diefenbaker's Cabinet began to revolt. As a result, the Prime Minister remained unable to arrive at an expedient decision on the issue.The situation became further aggravated when U.S. President John F. Kennedy, during the Cuban Missile Crisis, had ordered NORAD to initiate "Defence Condition 3" (or, DefCon 3).[187] It was expected by the United States that Canada would follow suit and place its forces on equivalent alert, but in order to do so the Minister of National Defence (at the time, Colonel Douglas Harkness) was required to obtain Prime Ministerial permission. Diefenbaker (and his divided Cabinet) refused to grant such permission for forty-two hours, the logic being that stalling on any concrete decision would distinguish Canada as a fully independent partner in NORAD as opposed to a subordinate member or one of secondary importance. The official argument had been that "under the NORAD agreement consultation should take place before the plans and procedures to be followed by NORAD in an emergency are implemented".[188] Nonetheless, Harkness proceeded to place Canadian Forces on alert by his own initiative and in defiance of Prime Minister and Cabinet. Even when the U.S. went to

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[187] Defence Conditions, in military verbiage, refer both to the level of preparedness of North American forces and to degrees of conflict. Thus, Defence Condition 5 signifies the absence of any imminent threat to North America or Western Europe and the routine status of military forces. As Defence Conditions decrease in degree, the level of threat to North America and Western Europe rises. Defence Condition "0" signifies global thermonuclear war.

[188] Cuthbertson, *supra* note 100, p. 63.

Defence Condition 2, Diefenbaker, still intent on supporting his principle of Canadian independence by refusing to comply with the Americans, had to be badgered into compliance by the Department of National Defence (DND). Moreover, and to the dismay of the DND and Cabinet, the Prime Minister refused to accept the nuclear warheads destined for the BOMARC missiles or those for Canada's NATO forces:

> [T]he issue of defense, and the BOMARCs in particular, revealed Diefenbaker caught in an agony of indecision. He wanted nuclear weapons in order to have more terrfying sabres to rattle at the Russians. But since he loathed the idea of American controls, he did not find it easy to accept the warheads. Diefenbaker was thus paralyzed between yes and no from February 1962 (the date of completing the first BOMARC sites in Canada) to February 1963 (when all parties united to defeat him in the House of Commons).[189]

Then leader of the opposition Lester B. Pearson, realizing the potentially fatal position which Diefenbaker had placed himself in, seized the opportunity to capitalize on the latter's indecisiveness by denouncing the government in Parliament and to the media and accusing the Prime Minister and his Cabinet of lack of leadership, disunity, and confusion. Pearson argued quite convincingly that Canada ought to prioritize and honour its international commitments and thus accept the nuclear warheads. Pearson pursued his attack on the government by demanding that Diefenbaker explain why the BOMARCs were purchased if there had not been any intention of arming them with nuclear warheads in the first place. Diefenbaker's failure in providing adequate response merely highlighted his indecisiveness.[190] The resignation of Defence Minister Harkness finally prompted the Opposition

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[189] Finlay and Sprague, *supra* note 153, p. 394.

[190] Diefenbaker attempted, albeit unconvincingly, to justify the government's failure to fulfill its defence commitments to NATO as a rethought non-proliferation measure. "We shall not", Diefenbaker declared in Parliament, "allow the extension of the nuclear family into Canada" -- see Department of External

to move for a vote of non-confidence.

(iii) Lester B. Pearson's *Volte-Face*: Proliferator, Pawn or Politician?

For a variety of reasons beyond this paper's purview, Howard Green had "fastened onto nuclear disarmament as his primary foreign policy goal and saw the adoption of a nuclear role by Canada as a fetter upon his quest...".[191] As a result of Green's opposition and Diefenbaker's indecision, Canada failed to fulfill its agreement with the U.S. to commit a nuclear capable force to NATO until 1963. When Lester B. Pearson assumed the reigns of Canadian government, notwithstanding his well known position that "there should be no extension of the nuclear club", he set out to arm the BOMARC missiles with their designated nuclear warheads.[192] Pearson had traditionally and strongly opposed any nuclear role whatsoever for Canada, and the Liberal Party under him had opposed the decision to accept the BOMARCs in the first place. However, Pearson was convinced that honouring Canada's international commitments and thus accepting the nuclear warheads under joint control would have to overcome his personal (and the government's) distaste with the affair as well as public

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Affairs, External Affairs, no. 15 (Ottawa: February, 1963) at 114.

[191] Michael Tucker, "Canada and the Non-Proliferation of Nuclear Weapons: The History of a Dilemma", in Paul Painchaud, (Ed.), From Mackenzie King to Pierre Trudeau: Forty Years of Canadian Diplomacy, 1945-1985. Quebec: University of Laval Press, 1989, p. 700. Tucker clarifies that Green's objections were directed toward Canada's nuclear commmitment to NORAD rather than to NATO. When in 1958, Diefenbaker had agreed to initiate discussions with the United States over the possibility of emplacing American nuclear weapons on Canadian soil under the auspices of NORAD, Green objected arguing that to do so would "cut more clearly across (his) image of Canada as a non-nuclear power independent of the U.S. in both foreign and defence policy fields".

[192] Robert Spencer, "External Affairs and Defence", in John Saywell, (Ed.), Canadian Annual Review for 1961. Toronto: 1962, at 107.

opposition to it in the name of credibility, legitimacy, and alliance commitments[193]. In other words, "alliance considerations had led him to reverse his long-held anti-nuclear position".[194] Pearson's position is revealed in a letter by him to one H.R. McArthur, which outlines the reasons why "the party and (myself) feel that Canada must accept nuclear weapons...", of which three paragraphs stand out[195]:

> (1) ...first and foremost, we have given our undertaking that we would accept such arms, and the policy of the western alliance relative to the defence of North America has been based on the assumption that we would honour this commitment. I am sure that you will agree that there is the same moral obligation for a proud nation such as Canada to honour its undertakings as there is for an honourable man in private life...Personally, if I have the honour to become the head of the government after April 8, I would propose, with my colleagues, to conduct the affairs of the country in accordance with the same standards of honourable behaviour and respect for commitments and undertakings which I have always tried to adhere to as an individual. My colleagues share this view.
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> (2) ...Canada's acceptance of nuclear weapons for defensive purposes has been part of a consistent attempt to have the nations of the western alliance share in a single nuclear deterrent

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[193] It is uncertain whether or not public opinion if fact opposed or was in favour of acquisition of nuclear weapons. Diefenbaker had procrastinated on the issue because his sources had informed him that public opinion opposed acquisition. However, other sources suggest that public opinion actually favoured acquisition by a slight majority, and that Diefenbaker had essentially been misinformed, in part as a result of an anti-nuclear/anti-American letter writing campaign that commanded much attention at the time but did not really reflect the majority public opinion. On this issue see R.B. Byers & D. Munton, "Canadian Defence, Nuclear Arms and Public Opinion: Consensus and Controversy", Paper presented at Annual Meeting of Canadian Political Science Association, Vancouver, British Columbia, (June 1983), and D. Munton, "Public Opinion and the Media in Canada from Cold War to Detente to New Cold War", International Journal Vol. 39, No.1 (Winter 1983-84) pp. 170-213.

[194] Epstein, *supra* note 4, p. 178.

[195] Letter written by Lester B. Pearson to H.R. McArthur, 22 February 1963. Pearson Papers, Leader of the Opposition Files, Vol. 94, File No. 806.2, Nuclear Policy, Part II, cited in Lentner, *supra* note 179 pp. 60-62.

> rather than develop individual deterrents of their own. In the past year or so there has been a tendency, noticeably in one quarter, for nations to break away from this common purpose, and there is a danger this tendency may grow. If we, too, were to opt out of the common program, even if it were to avoid having any nuclear weapons at all rather than to develop such weapons of our own, we would be encouraging by precept and example a trend which is frought with serious danger for the free world...
>
> (3) ...It is suggested in some quarters...that Canada should make little or no contribution to the military defence of the western alliance, but should rely on U.S. protection while devoting its efforts...to promote the cause of disarmament and of aid to underdeveloped nations. To begin with, I do not believe that as one of the strongest wealthiest and most stable western nations we can honestly refrain from playing our full part in common defence...And if we do refrain from making our full contribution to this defence, I believe that our voice and our influence in the cause of world peace would be negligible.

These excerpts clearly reveal Pearson's concerns over the cohesion of the Western alliance and the maintenance of Canadian influence at the international level. While he pursued to carry out these commitments, however, Pearson signalled that a "more acceptable non-nuclear Canadian role 'would be negotiated at a later date'".[196] Pearson tempered the scenario by suggesting that Canada's acceptance of nuclear weapons "did not constitute proliferation because Canada had not acquired an 'independent' control over the...weapons" under the two-key system.[197] Thus, with Pearson's fulfillment of Canada's nuclear commitments to NATO and NORAD, the Government found itself pressed to reassure Parliament and the populace that Canadian security requirements had not overridden the traditional non-proliferation stance. Paul Hellyer, then Minister of National Defence

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[196] *Ibid.*, at 179.

[197] Tucker, *supra* note 192 at 701.

under Pearson, explained that

> [a]cceptance by Canada of the strike role for the air division and the acquisition of the Honest John rocket for our brigade in Europe has committed us to signing a bilateral agreement with the United States to permit the immediate availability of nuclear devices. This does not make (us) a member of the 'Nuclear Club'. It only fulfills the general undertaking given by us and other member countries at the Heads of Government meeting in December 1957, and the specific undertaking of Canada in 1959 to accept the strike role...As a member of NATO, we have agreed to a strategy of deterrence. As long as we remain a member of the alliance we cannot separate ourselves, morally, from the general policy.[198]

The Pearson Government had therefore quickly accepted the nuclear role negotiated under Diefenbaker, arguing that Canada was required to live up to its international obligations as a member of NATO. The 1964 White Paper on Defence explains that, "having accepted responsibility for membership in a nuclear armed alliance, the question of nuclear weapons for Canadian Armed Forces (became) a subordinate issue".[199] While this improved Canada-U.S. relations, it heightened Ottawa's concern about Canadian influence in the bilateral relationship. The acceptance of the weapons under Pearson was seen as necessary not only for living up to international obligations, but for the cohesion of the preferred *multilateral* Western alliance as well -- understood to be the most important aspect of Canadian defence policy as it provided the greatest opportunity for Canadian "middle power meddling" and solace from the dominance of its hegemonic American partner at arms. Canada's role as an international peace broker was also emphasized under Pearson as a means by which Canada may secure a better identifiable role in the international community at the same time as it maintained its

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[198] Paul Hellyer, "Speech to the Opening Session of the Special Committee on Defence", Statements and Speeches 63:15 (27 June 1963), also cited in Tucker, *supra* note 191, p. 702.

[199] Department of National Defence, White Paper on Defence. Ottawa: Queen's Printer, 1964, p. 13.

traditional alliance commitments.[200] Evidently, explain Middlemiss and Sokolsky, "Pearson's clear resolve to accept the warheads and *then* to examine the prospect of negotiating out of a nuclear role for Canada was preferred by the Canadian public over Diefenbaker's prolonged waffling".[201]

(iv) **Pierre E. Trudeau: A Facade of Peaceful Pursuits?**

The Pearson Era had defined Canada's role in the international community as the world's foremost peacekeeper. In fact, Pearson's initiatives to expand this role (and more particularly his involvement in the Egyptian-Israeli conflict) had earned him a Nobel Peace prize. Moreover, the Pearson/Diefenbaker debate had, if anything, "marked a clear turning point in public and governmental attitudes toward the acquisition of nuclear weaponry".[202]

Pearson's successor, Pierre E. Trudeau, an ardent professor of peace and disarmament had severely rebuked the former's rather lenient position in 1963 regarding the BOMARC incident, calling Pearson a "defrocked priest of peace", notwithstanding the fact that Trudeau had expressed tremendous appreciation for Canada's new "peacekeeper" identity.[203] Pearson's acceptance of American nuclear warheads for Canadian forces had incurred Trudeau's harsh criticism: independent control of the weapons or not, Canada had contributed, according to Trudeau, to the proliferation of nuclear weapons and the influence of Canada as either an advocate of nuclear non-proliferation

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[200] *Ibid.*

[201] Middlemiss and Sokolsky, *supra* note 171, p.118.

[202] *Ibid.*

[203] Finlay & Sprague, *supra* note 153, p. 419.

or an international peace broker had been seriously compromised.[204] In 1971, the Trudeau Government formally announced that "it was no longer appropriate for the Canadian Armed Forces to be equipped with nuclear weapons", and that Canada would therefore abandon its nuclear role in NATO and shut down all of its BOMARC sites -- to which there was no public objection.[205] The new Prime Minister chose to undo that which Diefenbaker had begun a few years earlier by removing all nuclear warheads from the possession of Canadian Forces both within Canada and in Europe.

> [C]anada had divested itself of the Honest John missiles in Europe by 1970 and of the nuclear-strike weapons on its aircraft in Europe in 1972. The BOMARC surface-to-air missiles were returned from Canada to the United States in 1972 and the CF-101s with nuclear equipped Genie rockets were to be withdrawn in 1984. Thus, Trudeau said, "we will rid ourselves of the last vestiges of nuclear weapons".[206]

While there can be no doubt about the depth of Trudeau's express concern over Canada's participation in the horizontal proliferation of nuclear weapons under the two previous governments, the question is to reasons behind his position. While some scholars have attributed Trudeau's pursuits to an instinctive and personal dislike of nuclear weapons as well as a fear of further nuclear proliferation, our theoretical approach would anticipate the more plausible hypotheses of, first, a desire that Canada assume an international peacekeeper/broker image more akin to its middle power status in an effort to increase Canada's influence in the international arena, and, second, Trudeau's strong misgivings about what too close a relationship with the United States meant for Canadian

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[204] Tucker, *supra* note 191.

[205] Epstein, *supra* note 4, p. 179 and Middlemiss & Sokolsky, *supra* note 171, p. 118.

[206] *Ibid.*

sovereignty.[207] Much doubt remains over the Prime Ministerial commitment to non-proliferation, especially in view of Trudeau's strong and continued commitment to a Canadian export-oriented nuclear industry.

According to Von Riekhoff, Trudeau's defence policy centered around three main issues: (1) nuclear safeguards; (2) the strategy of suffocation; and (3) the 'Peace Initiative'.[208] That these innovative policies were to be engaged in on a unilateral basis was a uniquely satisfying quality which every previous government in Ottawa since the end of the Second World War had wished for, one that demonstrated quite clearly Canadian independence in foreign policy issues. These new defence priorities took their definite form following the 1974 Indian nuclear explosion which had had a particularly sobering effect on the Canadian Government. "[C]anada adopted a national policy of fullscope safeguards that applied to all countries to which it exported nuclear materials, equipment, and technology".[209] Whereas Canada had pioneered the development of nuclear technology, it now pioneered its suffocation. The strategy of suffocation was exalted for the first time in 1978 by Trudeau in a speech to the United Nations. Essentially, the strategy intended to bring the nuclear arms race to an end by halting technological advancement. As for his peace initiative, the Prime Minister called for "the combination of general confidence-building measures with specific arms control proposals and, among the latter, the call for an international conference of the five nuclear weapons powers".[210] The initiative proposed a strengthening of the NPT to include additional states, new

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[207] Tucker, *supra* note 191, p. 707, and Mueller, *supra* note 101, p.869.

[208] Hampson, Von Riekhoff, & Roper, *supra* note 142, pp. 191-192.

[209] *Ibid.*, p. 92.

[210] *Ibid.*

initiatives to advance the Mutual and Balanced Force Reduction (MBFR) Talks, a ban on anti-satellite weapons systems testing and deployment, and an agreement to reduce the "excessive mobility" of intercontinental ballistic missiles (ICBMs).

Trudeau's Administration was arguably the first fundamental effort to "impose an explicit conception" of Canadian national interest:

> [P]articularly during (his) first four years in office, the rapid dispersion of power in the international system, combined with Trudeau's charismatic leadership and Parliamentary majority, provided a refreshing freedom to re-orient Canadian foreign policy in a fundamental way, in considerable detail and in accordance with a precise, integrated conception of Canada's distinctive national interests.[211]

This exercise in a more sophisticated form of Canadian foreign policy formulation is largely attributable to the labours of Trudeau himself and, to a lesser extent, to a growing bureaucracy with increasing expertise in international relations. By then, the nature of the nuclear weapons debate had changed. While Trudeau's acceptance (in 1982) of U.S. air-launched Cruise missile testing in Canada[212] as well as the new American Strategic Defence Initiative (SDI)[213] had begun to raise questions in Parliament and in public (where concern over U.S. "hawkishness" was repeatedly expressed), his peacekeeper/broker role for Canada, his "emphatic rapport with the socio-economic

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[211] John Kirton, "Elaboration and Management of Canadian Foreign Policy", in Tucker, *supra* note 191, p. 63.

[212] While the government was unprepared for the public opposition to the missile testing, Ottawa's rationale that it was "a necessary and fair contribution to NATO security by Canada" was generally accepted by Parliament and public without protest. See John Barrett & Douglas Ross, "The Air-Launched Cruise Missile and Canadian Arms Control Policy", Canadian Public Policy 11:4 (December 1985) p. 718.

[213] Also referred to as the "Star Wars" project -- the idea of which was to launch laser-armed satellites into Earth's orbit which, in the event of a nuclear attack on North America, would destroy incoming missiles in mid-flight, thus rendering the Soviet arsenal obsolete.

imperatives of leaders of the Third World, and pronounced antipathy towards defence and nuclear involvements" earned him considerable support.[214] Canada thus distanced itself from the perceived destabilizing and war-mongering U.S. strategic doctrines of the Nixon, Johnson, and later Reagan Administrations. When applied to Canadian nuclear weapons renunciation in particular, the Trudeau experience underlines the "de-emphasis" of any "systemically-oriented concern with fostering global peace and security through mediatory initiatives and the progression of international institutional promotion, in favour of policies derived from Canada's particular, domestically-linked national interests", and meant to further its international prestige and assert its national sovereignty.[215] These objectives in turn meant that the conception of the Canadian role in the international system would move away from expected traditional militarism to the promotion of nuclear non-proliferation, international economic development, and peacekeeping -- a new international relevance centered on resolving sources of global conflict. It was, in theory as well as practice, the most feasible counterweight to the perpetually disturbing Canada-U.S. bilateral relationship.

Thus, in foreign policy formulation, decision-makers choose authoritatively among competing alternatives, and the rational-choice model (an element of realist thought) is the method by which decision-makers order their alternatives and decide on the most efficient outcome relative to both their state's capabilities and the ends sought. In any such discussion on how nation-states do or should behave, one is systematically drawn into an analysis of national interest.[216] Gilpin has observed that

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[214] Kirton, *supra* note 211.

[215] *Ibid.*, p. 64.

[216] George Quester. The Continuing Problem of International Politics. Cornell: Dryden Press, 1974, p. 16.

while states may seek truth, beauty and justice, "all these...noble goals will be lost unless one makes provision for one's security in the power struggle among groups".[217] In other words, states are first and foremost driven by an interest for survival and are acutely conscious of their relative capabilities, "which are the ultimate basis for their security and independence in an anarchical, self-help international context".[218] Once Canada's survival was guaranteed by the American nuclear umbrella, realism re-directed Canadian policy-makers towards Canadian "individualistic" well-being. In this sense, we may even rely upon the conventional Prisonner's Dilemma. The Dilemma seeks to depict international relationships and state behaviour by reference to an individualistic payoff maximization assumption -- that is, "a player responds to an iterated conventional Prisoner's Dilemma with conditional cooperation *solely out of a desire to maximize its individual long-term total payoffs*".[219] Lipson suggests that the Dilemma may be viewed as paralleling "the Realist conception of sovereign states in world politics" as each player "is assumed to be a self-interested, self-reliant maximizer of his own utility".[220] Thus, our modified version of neorealism expects a state's national interest to incorporate two distinct elements: (1) the state's survival interest; and (2) individual long-term payoffs within the international system. The argument here seeks to compound the traditional Hobbesian state of war with the need to consider national interest in terms of expressions of national sovereignty and international prestige and influence in addition to survival. For Canada, the latter came in the form

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[217] Robert Gilpin, "The Richness of the Tradition of Political Realism", International Organization 38 (Spring) p. 305.

[218] Grieco, *supra* note 24, p. 498.

[219] *Ibid.*, p. 496.

[220] Lipson, "International Cooperation in Economic and Security Affairs", World Politics 37 (October) p. 2, also cited in Grieco, *Ibid.*

of multilateralist and internationalist foreign policies (in contrast with the United States), and with the renunciation of an indigenous nuclear weapons arsenal (in stark contrast with the United States) all of which was interpreted as a sign of Canadian independence vis-a-vis the U.S. in foreign policy formulation. Thus, in the words of Prime Minister Trudeau upon dismantling the nuclear warheads in the possession of Canadian Forces, "our defence policy now is more to impress our friends than frighten our enemies".[221] Trudeau's statement echoed a 1955 Department of External Affairs position paper which had succinctly assessed Canada's position (following the Geneva Summit of the Atlantic Alliance that summer) as follows:

> ...[i]f the Americans believe a real danger of attack (from the U.S.S.R.) across Canada remains, there will be pressure upon us to accept the United States bases and troops in the North and *ipso facto* pressure on our sovereignty. If therefore, one of our aims is to retain and strengthen our independence of the United States, it follows that we can best accomplish this in a world where the danger of war is diminished (via international cooperation). Thus the two basic Canadian aims -- security vis-a-vis the U.S.S.R., and the maintenance of our national independence coincide...[222]

Canada would therefore engage in policies that exhibit major divergences in behaviour vis-a-vis the United States regarding the appropriate doctrine and capabilities required by the Western Alliance and, more specifically, on the matter of whether it was necessary to pursue capabilities that reflected a "hawkish" approach to international conflict -- i.e. nuclear deterrence -- the U.S. said "yes", Canada said "no", and all the while Canada enjoyed the benefit of extended deterrence.

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[221] John Honderich, "The Arctic Option: NATO and the Canadian North", The Canadian Forum Vol. 67, No. 772 (October 1987), p. 16.

[222] Department of External Affairs, "Canadian Policy in the Light of Soviet Tactical Changes since Geneva" (22 September 1955).

IV - Conclusion

Ultimately, what this thesis has attempted to demonstrate is that, in the case of Canada, the disincentives for nuclear acquisition clearly outweighed the incentives, and that realist theory is the most appropriate framework for understanding why this is so. This thesis forwards two fundamental hypotheses in its explanation of Canada's nuclear renunciation, with which Quester, quoted above, agrees when he writes that (1) "Canada's willingness to foreswear nuclear weapons must be attributed largely to its political and geographic closeness to the U.S."; and (2) "it has come to interpret abstention as a sign of independence".[223]

The Canadian preference throughout the post-war era has consistently been a security policy that emphasized multilateralism over an exclusively bilateral relationship with the United States. The rationale for such a preference, this thesis has attempted to show, does not require great diplomatic astuteness on the part of the analyst for it is clear that even in well forged alliances (especially bilateral ones) as the Canada-U.S. defence relationship, the disproportionately weaker of the two will usually seek to enhance its position in the international system by exploiting whatever alternatives remain, of which "internationalism" in the broad sense offered the greatest viability for Canada as a counterweight to the pressures associated with being allied to a hegemon. And because, as Prime Minister Trudeau had bluntly reminded in an address to the Alberta Liberal Association in 1969, "(Canada has) no defence policy...except that of (the United States and NATO)",[224] any assertion of Canadian independence in foreign policy formulation (since defence policy inevitably determines foreign policy) would require a defence policy that signaled a pull away from the U.S. (and to a lesser

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[223] George Quester, *supra* note 152, p. 154.

[224] Calgary, Alberta, 12 April 1969. See Department of External Affairs, No. 69:8.

extent from NATO). In this sense, to combine reliance on extended nuclear deterrence with the renunciation of a Canadian bomb provided the best framework within which prestige enhancing internationalist policies could be pursued. Dorscht and Legare suggest that contradictory policy stances such as the ones at issue are inherent to middle powers that have a vested interest in being a "meddling power" in a world dominated by superpowers.[225] If enganging in such contradictory policies serves the interests of the country, then it can be argued that professing non-proliferation while relying on a nuclear umbrella remain consistent with realist theory. In this sense both policy options are essentially "different manifestations of realism".[226]

> (Idealism), to the extent that one can identify it in the practice of Canadian foreign policy, has merely resulted from applying realist precepts to Canada's limited capabilities. Alternatively, one can interpret much of this idealism as a neorealist view. Multilateral cooperation and internationalism tends to be justified by its contribution to enhancing Canadian influence and power...[227]

Thus, this thesis has argued, that both Canadian internationalist policies and nuclear renunciation are not inconsistent with realist theory, but, in fact, our modified form of neorealism which allows us to delve into an analysis of the state as a unit within the international system could expect Canada to behave as it did. Canada's national interests were best served via the "skilful deployment of its resources among all available channels -- both multilateral and bilateral".[228] Insofar as Canada's

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[225] Dorscht and Legare, *supra* note 33, p. 7.

[226] *Ibid.*

[227] *Ibid.*

[228] Bland and Young, *supra* note 32, p. 116

internationalism and nuclear renunciation serve its strategic imperatives, realism remains the most salient and parsimonious theoretical approach. While, it is argued, state choices cannot be separated from the notion of national interest, making the connection raises the risk that the reader infer the unfalsifiability of the realist paradigm. Insofar as national security questions arise, it is widely held in international relations discourse that realism provides the best explanations notwithstanding its many deficiencies noted above. Where the liberal theoretical alternatives have seemingly found their haven is the world political economy where, especially among democracies, complex economic interdependence has generated vast cooperative economic arrangements which exist with little apparent concern for gaps in relative capabilities between adherents to the regimes and an inclination towards the achievement of joint gains in power.[229] In the latter scenarios, the emphasis rests on information sharing, reductions in transaction costs, cooperative monitoring, and a redefinition of national interest in many instances. It would, however, prove particularly valuable to investigate whether or not states continue to comply with regime rules when perceptions of national interest appear to conflict with the requirements of the regime.

Of course, while one cannot derive any generalizations from a single case study, it is possible to discern evidence that either confirms or falsifies the working hypotheses. In the attempt to do so here, a particular theoretical framework was conceived to assist in the effort. The case study involves two allies and their unique security relationship, with one partner a dominant hegemon, the other a deferential middle power. Certainly, some of the propositions posited herein may potentially apply

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[229] Consider, for example, the International Monetary Fund (IMF), the General Agreement on Tariffs and Trade (GATT), the World Bank, the Organization for Economic Cooperation and Development (OECD), the European Single Market, the European Monetary Union, the North American Free Trade Agreement (NAFTA), among others.

to other states, although it would be beyond the scope of this study to attempt to examine what other situations the evidence may apply to. The influence of the powerful situational and systemic effects examined in the case of Canada were filtered through a domestic political process which tends to show that foreign and defence policy formulation cannot be properly studied if categorically separated from concepts like party politics, bureaucratic pressures, public opinion, state roles, elite politics, and even the personal characteristics of leaders, *etc.*[230] Thus, in seeking to advance our understanding of state choices and the "games nations play"[231], this case study may contribute in pointing to the interaction of variables. The advantage of such an approach is that it permits one to combine historical detail with political analysis.[232]

Canada presents itself as a refreshingly different phenomenon, one in which a pioneering nuclear country not only renounced any option of nuclear weapons development but by its own volition rid itself of the weapons in the possession of its armed forces that belonged to a foreign power. The entire nuclear "incident", that is, Canada's halfhearted participation in the nuclear arms race and its wholehearted renunciation of nuclear weapons, is illustrative of the dichotomous split that has characterized Canadian foreign policy for well over half a century. It is, in essence, a search for identity which "has an inner consistency of its own, but outwardly it is often expressed in

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[230] Lentner, supra note 179, p. 65.

[231] The phrase belongs to John Spanier, Games Nations Play. Washington D.C.: Congressional Quarterly Inc., 1990.

[232] Lentner, *supra* note 179, p. 65.

contradictory ways", especially in the complex realm of international relations. "There are", as Epstein plainly states, "lessons to be learned from the Canadian experience", both normative and academic.[233]

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[233] Epstein, *supra* note 4, p. 182.

Appendix A

Treaty on the Non-Proliferation of Nuclear Weapons

Opened for Signature: July 1, 1968
Entered into Force: March 5, 1970
Number of Parties as of October 1, 1989: 140

Text:

The States concluding this Treaty, hereinafter referred to as the "Parties to the Treaty,"

Considering the devastation that would be visited upon all mankind by a nuclear war and the consequent need to make every effort to avert the danger of such a war and to take measures to safeguard the security of peoples,

Believing that the proliferation of nuclear weapons would seriously enhance the danger of nuclear war,

In conformity with resolutions of the United Nations General Assembly calling for the conclusion of an agreement on the prevention of wider dissemination of nuclear weapons,

Undertaking to cooperate in facilitating the application of International Atomic Energy Agency safeguards on peaceful nuclear activities,

Expressing their support for research, development and other efforts to further the application, within the framework of the International Atomic Energy Agency safeguards system, of the principle of safeguarding effectively the flow of source and special fissionable materials by use of instruments and other techniques at certain strategic points,

Affirming the principle that the benefits of peaceful applications of nuclear technology, including any technological by-products which may be derived by nuclear-weapon States from the development of nuclear explosive devices, should be available for peaceful purposes to all Parties of the Treaty, whether nuclear-weapon or non-nuclear-weapon States,

Convinced that, in furtherance of this principle, all Parties to the Treaty are entitled to participate in the fullest possible exchange of scientific information for, and to contribute alone or in cooperation with other States to, the further development of the applications of atomic energy for peaceful purposes,

Declaring their intention to achieve at the earliest possible date the cessation of the nuclear arms race and to undertake effective measures in the direction of nuclear disarmament,

Urging the cooperation of all States in the attainment of this objective,

Recalling the determination expressed by the Parties to the 1963 Treaty banning nuclear weapon tests in the atmosphere, in outer space and under water in its Preamble to seek to achieve the discontinuance of all test explosions of nuclear weapons for all time and to continue negotiations to this end,

Desiring to further the easing of international tension and the strengthening of trust between States in order to facilitate the cessation of the manufacture of nuclear weapons, the liquidation of all their existing stockpiles, and the elimination from national arsenals of nuclear weapons and the means of their delivery pursuant to a treaty on general and complete disarmament under strict and effective international control,

Recalling that, in accordance with the Charter of the United Nations, States must refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any State, or in any other manner inconsistent with the Purposes of the United Nations, and that the establishment and maintenance of international peace and security are to be promoted with the least diversion for armaments of the world's human and economic resources.

Have agreed as follows:

Article I

Each nuclear-weapon State Party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly; and not in any way to assist, encourage, or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.

Article II

Each non-nuclear-weapon State Party to the Treaty undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices.

Article III

1. Each non-nuclear-weapon State Party to the Treaty undertakes to accept safeguards, as set forth in an agreement to be negotiated and concluded with the International Atomic Energy Agency in accordance with the Statute of the International Atomic Energy Agency and the Agency's safeguards system, for the exclusive purpose of verification of the fulfilment of its obligations assumed under this Treaty with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices. Procedures for the safeguards required by this article shall be followed with respect to source or special fissionable material whether it is being produced, processed or used in any principal nuclear facility or is outside any such facility. The safeguards required by this article shall be applied on all source or special fissionable material in all peaceful nuclear activities within the territory of such State, under its jurisdiction, or carried out under its control anywhere.

2. Each State Party to the Treaty undertakes not to provide:
   (a) source or special fissionable material, or

(b) equipment or material especially designed or prepared for the processing, use or production of special fissionable material, to any non-nuclear-weapon State for peaceful purposes, unless the source or special fissionable material shall be subject to the safeguards required by this article.

3. The safeguards required by this article shall be implemented in a manner designed to comply with Article IV of this Treaty, and to avoid hampering the economic or technological development of the Parties or international cooperation in the field of peaceful nuclear activities, including the international exchange of nuclear material and equipment for the processing, use or production of nuclear material for peaceful purposes in accordance with the provisions of this article and the principle of safeguarding set forth in the Preamble of the Treaty.

4. Non-nuclear-weapon States Party to the Treaty shall conclude agreements with the International Atomic Energy Agency to meet the requirements of this article either individually or together with other States in accordance with the Statute of the International Atomic Energy Agency. Negotiation of such agreements shall commence within 180 days from the original entry into force of this Treaty. For States depositing their instruments of ratification or accession after the 180-day period, negotiation of such agreements shall commence not later than the date of such deposit. Such agreements shall enter into force not later than eighteen months after the date of initiation of negotiations.

Article IV

1. Nothing in this Treaty shall be interpreted as affecting the inalienable right of all the Parties of the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II of this Treaty.

2. All the Parties to the Treaty undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy. Parties to the Treaty in a position to do so shall also cooperate in contributing alone or together with other States or international organizations to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of non-nuclear-weapon States Party to the Treaty, with due consideration for the needs of the developing areas of the world.

Article V

Each party to the Treaty undertakes to take appropriate measures to ensure that, in accordance with this Treaty, under appropriate international observation and through appropriate international procedures, potential benefits from any peaceful applications of nuclear explosions will be made available to non-nuclear-weapon States Party to the Treaty on a non-discriminatory basis and that the charge to such Parties for the explosive devices used will be as low as possible and exclude any charge for research and development. Non-nuclear-weapon States Party to the Treaty shall be able to obtain such benefits, pursuant to a special international agreement or agreements, through an appropriate international body with adequate representation of non-nuclear-weapon States. Negotiations on this subject shall commence as soon as possible after the Treaty enters into force. Non-nuclear-weapon States Party to the Treaty so desiring may also obtain such benefits pursuant to bilateral agreements.

Article VI

Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.

Article VII

Nothing in this Treaty affects the right of any group of States to conclude regional treaties in order to assure the total absence of nuclear weapons in their respective territories.

Article VIII

1. Any Party to the Treaty may propose amendments to this Treaty. The text of any proposed amendment shall be submitted to the Depositary Governments which shall circulate it to all Parties to the Treaty. Thereupon, if requested to do so by one-third or more of the Parties to the Treaty, the Depositary Governments shall convene a conference, to which they shall invite all the Parties to the Treaty, to consider such an amendment.

2. Any amendment to this Treaty must be approved by a majority of the votes of all the Parties to the Treaty, including the votes of all nuclear-weapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency. The amendment shall enter into force for each Party that deposits its instrument of ratification of the amendment upon the deposit of such instruments of ratification by a majority of all the Parties, including the instruments of ratification of all nuclear-weapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency. Thereafter, it shall enter into force for any other Party upon the deposit of its instrument of ratification of the amendment.

3. Five years after the entry into force of this Treaty, a conference of Parties to the Treaty shall be held in Geneva, Switzerland, in order to review the operation of this Treaty with a view to assuring that the purposes of the Preamble and the provisions of the Treaty are being realized. At intervals of five years thereafter, a majority of the Parties to the Treaty may obtain, by submitting a proposal to this effect to the Depositary Governments, the convening of further conferences with the same objective of reviewing the operation of the Treaty.

Article IX

1. This Treaty shall be open to all States for signature. Any State which does not sign the Treaty before its entry into force in accordance with paragraph 3 of this article may accede to it at any time.

2. This Treaty shall be subject to ratification by signatory States. Instruments of ratification and instruments of accession shall be deposited with the Governments of the United States of America, the United Kingdom of Great Britain and Northern Ireland and the Union of Soviet Socialist Republics, which are hereby designated the Depositary Governments.

3. This Treaty shall enter into force after its ratification by the States, the Governments of which are designated Depositaries of the Treaty, and forty other States signatory to this Treaty and the deposit of their instruments of ratification. For the purposes of this Treaty, a nuclear-weapon State is one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to January 1, 1967.

4. For States whose instruments of ratification or accession are deposited subsequent to the entry into force of the Treaty, it shall enter into force on the date of the deposit of their instruments of ratification or accession.

5. The Depositary Governments shall promptly inform all signatory and acceding States of the date of each signature, the date of deposit of each instrument of ratification or of accession, the date of the entry into force of this Treaty, and the date of receipt of any requests for convening a conference or other notices.

6. This Treaty shall be registered by the Depositary Governments pursuant to Article 102 of the Charter of the United Nations.

Article X

1. Each Party shall in exercising its national sovereignty have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other Parties to the Treaty and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests.

2. Twenty-five years after the entry into force of the Treaty, a conference shall be convened to decide whether the Treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods. This decision shall be taken by a majority of the Parties to the Treaty.

Article XI

This Treaty, the English, Russian, French, Spanish and Chinese texts of which are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of this Treaty shall be transmitted by the Depositary Governments to the Governments of the signatory and acceding States.

IN WITNESS WHEREOF the undersigned, duly authorized, have signed this Treaty.

DONE in triplicate at the cities of London, Moscow and Washington, the first day of July, one thousand nine hundred and sixty-eight.

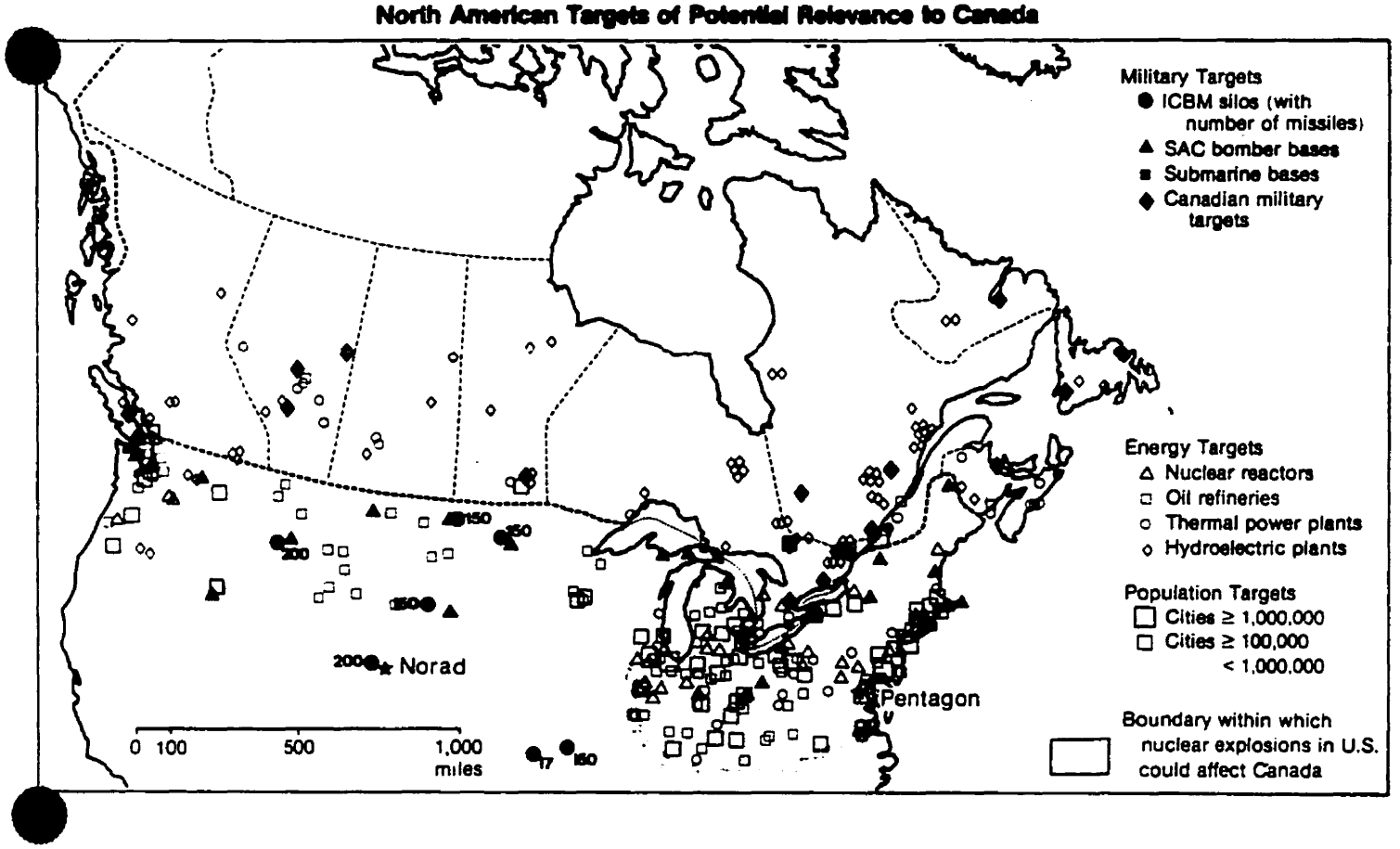
In a press release on November 28, 1989, Dr. René J.A. Lévesque, president of the Atomic Energy Control Board (AECB), announced that "the government has approved additional resources for the agency amounting to 93 staff positions and a total of $25.4 million over the next two and a half years. The AECB's current annual budget is approximately $26 million, and it has an authorized complement of 267." This increase is to ensure that "the resources available to the agency keep pace with the advances and developments in the nuclear industry." Included in the new AECB budget is $3.5 million per annum for the Canadian Safeguards Support Program as well as a total of four person years.

Verification Brochures

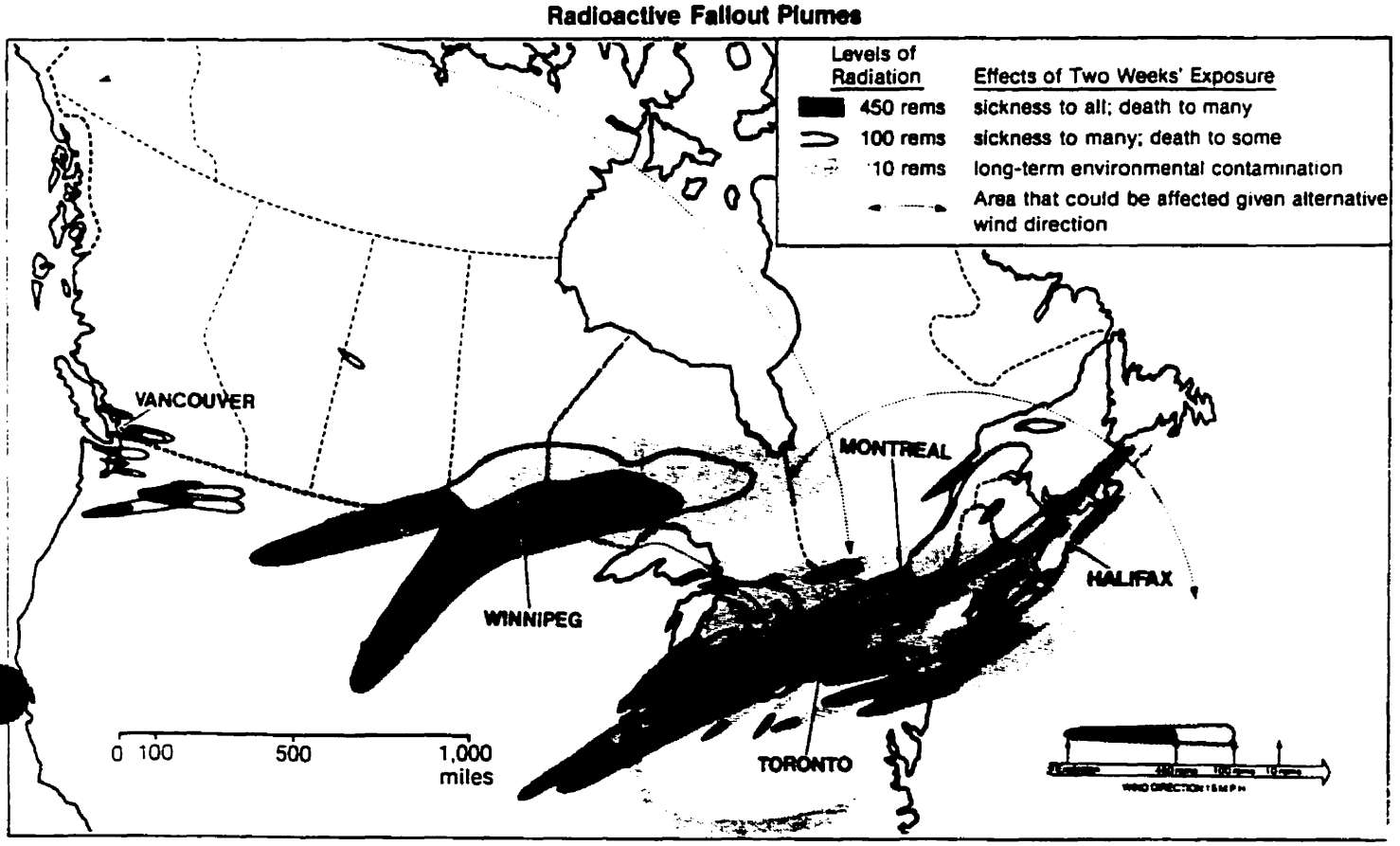
No. 1 *Seismic Verification*, 1986
No. 2 *The PAXSAT Concept*, 1987
No. 3 *Verification Research*, 1987
No. 4 *Cruise Missiles*, 1988

Appendix B

North American Targets of Potential Relevance to Canada

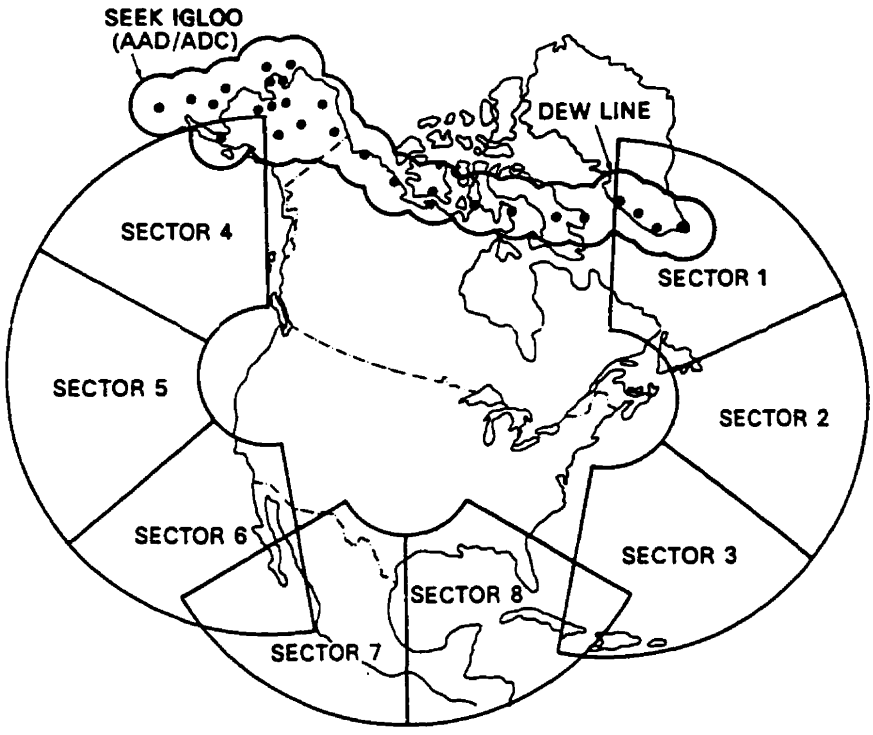


Radioactive Fallout Plumes

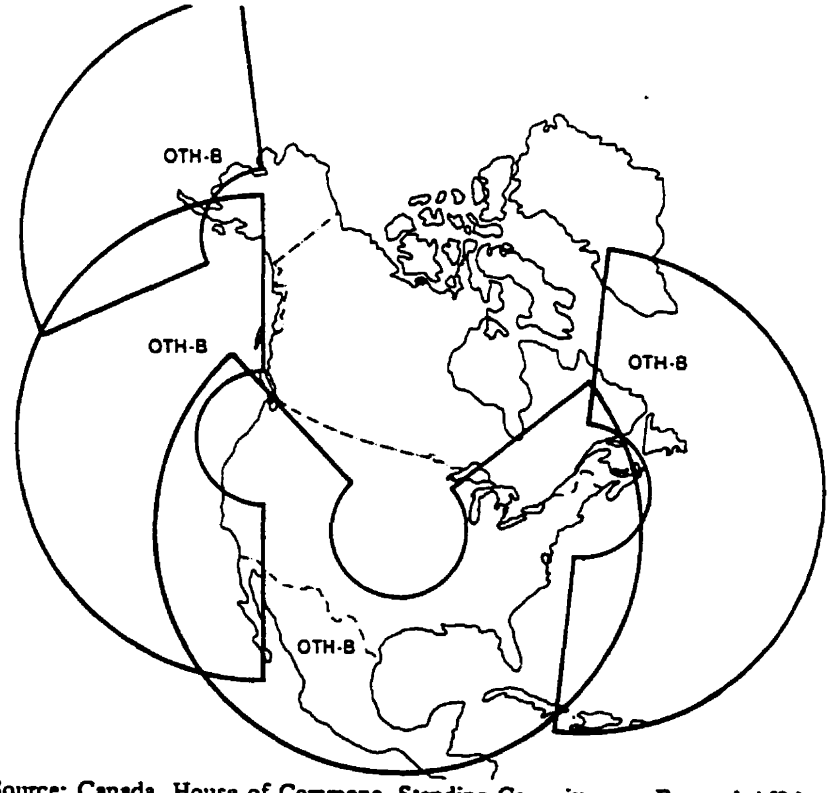


Source: "What Would Happen to Canada in the Event of Nuclear War", in E. Regehr & S. Rosenblum, (Eds.). Canada and the

Appendix C



Source: Canada, Senate, Special Committee on National Defence, *Canada's Territorial Air Defence*, January 1985 (Ottawa: Supply and Services).



Source: Canada, House of Commons, Standing Committee on External Affairs and National Defence *Minutes of Proceedings*, 21 March 1985 (Ottawa: Supply and Services).

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